PROCEEDINGS

OF THE

MADRAS GOVERNMENT

IN THE

PUBLIC WORKS DEPARTMENT

IRRIGATION BRANCH,

FOR

THE MONTH OF NOVEMBER 1882.

Printed by Authority.

MADRAS:
PRINTED BY E. KEYS, AT THE GOVERNMENT PRESS.

1882.

EXAM... 13 JA... ACC...

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GOVERNMENT OF MADRAS.

PUBLIC WORKS DEPARTMENT.

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78, 79	*Floods in Tanjore.*—Proceedings in the Revenue Department on the damages caused by the —, communicated to the Superintending Engineer, Sixth Circle, and the early commencement of work in connection with the Cauvery Regulators and the Nanjamanaur Head Sluice ordered.	29th Nov. No. 955 I.	...	24th July 1882, No. 568 I. 6th Sept. 1882, No. 705 I. 3rd Oct. 1882, No. 776 I. 9th Oct. 1882, No. 796 I.	
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83, 84	*Sangum Project—Head Works, K, Buildings.*—The Examiner authorized to accept the completion report for work done under —.	29th Nov. No. 958 I	...	15th June 1882, No. 472 I.	
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89, 90	*Vaigai River—Construction of the Samiyappen Anicut.*—The opinion of the Collector of Madura that the carrying out of the Periyár Project would admit of the —, recorded.	29th Nov. No. 961 I.	...	13th Nov. 1882, No. 920 I.	
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IRRIGATION DEPARTMENT.

PROCEEDINGS OF THE MADRAS GOVERNMENT,

FOR THE MONTH OF NOVEMBER 1882.

Irrigation.
Account.

No. 1.

READ—the following letter from Major G. F. L. MARSHALL, R.E., Under Secretary to the Government of India, Public Works Department (Civil Works—Irrigation), to the Secretary to the Government of Madras, Public Works Department, dated Simla, 18th October 1882, No. 383 I. :—

With reference to your endorsement, No. 711 I., of 8th September last, forwarding the Progress Report of Irrigation Productive Public Works in the Madras Presidency for 1881-82, I am directed to point out that in the General Abstract, under the Sangam Project, the estimate of direct outlay as sanctioned should be entered in the column "Amount of Estimate" under Works, Establishment and Tools and Plant separately, and to request that the necessary correction slips for doing this may be forwarded.

No. 2.

ORDER—dated 3rd November 1882, No. 891 I., Public Works.

Ordered that the following errata be issued:—

Statement which accompanied Proceedings of Madras Government, No. 710 I. of 8th September 1882, page 11—

	Amount of Estimate. For	Amount of Estimate. Read
Sangam Project Works	23,64,935	23,64,935
Establishment	...	5,78,451
Tools and Plant	...	82,670
Total ...	23,64,935	30,26,056
Deduct Receipts on Capital Account ...	...	1,29,619
Net Direct Charges	...	28,96,437
Grand Total ...	3,15,78,881	3,20,02,323

2. Ordered that a copy of these Proceedings be forwarded to the Government of India.

(Here enter No. 892 I., dated 3rd November 1882.)

(True Extract.)

(Signed) J. O. HASTED, Colonel, R.E.,
Ag. Joint Secy. to Govt., P.W.D.,
Irrigation Branch.

To the Superintending Engineers, First, Second, Fifth and Sixth Circles.
" the Chief Engineer for Irrigation.
" the Examiner, Public Works Accounts.
" the Revenue Department.

No. 3.

ENDORSEMENT—dated 3rd November 1882, No. 892 I., Public Works.

Forwarded.

(Signed) J. O. HASTED, Colonel, R.E.,
Ag. Joint Secy. to Govt., P.W.D.,
Irrigation Branch.

IRRIGATION.
ACCOUNT..

Govt. of (1882) Madras.

PUBLIC WORKS.

Dated November, 3rd.

Recd. *Encl.*

G.O., 3rd Nov. 1882, No. 892 I.

NOVEMBER.

Nos. 1—3.

Irrigation Productive Public Works.

ERRATA in statement showing progress of — (Capital Account) for 1881-82.

GOVERNMENT OF MADRAS.

PUBLIC WORKS DEPARTMENT.

Irrigation.

No. 4. Errata in Proceedings of Madras Government No. 845 I., dated 23rd October 1882, paragraph 2.

For Rs. 8,691, *read* Rs. 7,164.

(True Extract.)

(Signed) J. O. HASTED, Colonel, R.E.,
Ag. Joint Secy. to Govt., P.W.D.,
Irrigation Branch.

To the Superintending Engineer, Sixth Circle.
" Chief Engineer for Irrigation.
" Examiner, Public Works Accounts.

IRRIGATION.

Govt. of {1882} Madras.

PUBLIC WORKS.

Dated November, 3rd.

Recd. *Encl.*

G.O., 3rd Nov. 1882, No. 893 I.

NOVEMBER.

No. 4.

Errata.

In G.O., No. 845 *I., dated* 23*rd October* 1882.

GOVERNMENT OF MADRAS.

PUBLIC WORKS DEPARTMENT.

Irrigation.
Account.

No. 5.

READ—the following papers :—

From J. C. LARMINIE, Esq., Executive Engineer, in charge First Circle, to the Chief Engineer for Irrigation, dated Dowlaishweram 8th July 1882, No. 880 G.D.

I have the honor to submit herewith four Statements, A, B, C, and D, showing the navigation receipts and expenditure for the years 1880 and 1881 prepared in accordance with the instructions conveyed in your memorandum, No. $\frac{1}{29\ G.D.}$, dated 15th March 1882.

ENCLOSURES.

A.

STATEMENTS of Receipts and Charges—Godávari Delta Navigation for the Calendar year 1881.

Receipts (Calendar year 1881). Description.	Amount.	Remarks.	Charges for Official year 1880-81. Description.	Amount.	Remarks.
	RS.	For details see Statement B.		RS.	For details see Statement C.
License fees for Government boats	3,312		(1.) Lock establishments...	20,582	
Do. do. for do. steamers...	105		(2.) Lock and lock weir repairs	20,344	
Do. do. for do. range boats	165		(3.) Navigation buildings.	743	
Do. do. do. passenger boats	5,538		(4.) Tow-path maintenance	3,258	
Do. do. do. cargo boats ...	38,623		(5.) Dredging ...	277	
Do. do. do. Miscellaneous (including private or pleasure boats, duplicate licenses, &c.) ...	358		(6.) Share of canal maintenance	8,683	
Tolls on cargo boats ...	2,343		(7.) Miscellaneous (including any charges not appertaining to the first six items) ...	1,219	
Do. passenger boats ...	177			55,106	
Do. Miscellaneous. ...	60				
Do. rafts	4,989				
Total ...	55,670		Interest for the year on capital outlay on navigation works proper up to end of 1880-81 at 4 per cent	24,504	
Loss ...	23,940				
Net Total ..	79,610		Total ...	79,610	

STATEMENT of Capital Outlay on Navigation Works proper of the Godávari Delta from the year 1871-72 inclusive.

Section of Delta.	To end of 1879-80.	For 1880-81.	Total.
	RS.	RS.	RS.
Eastern and Central Delta	2,34,072	...	2,34,072
Western Delta	3,45,813	32,712	3,78,525
	5,79,885	32,712	6,12,597

B

STATEMENT showing Navigation Receipts, &c., for the years 1880 and 1881.

Particulars.	Calendar Year 1880.					Calendar Year 1881.				
	Class.	Total Number.	Measured Tonnage licensed to 50 cub. ft. = 1 ton.	Number of Passengers licensed to carry.	Amount of License paid. (RS. A. P.)	Class.	Total Number.	Measured Tonnage licensed to 50 cub. ft. = 1 ton.	Number of Passengers licensed to carry.	Amount of License. (RS. A. P.)
License fees for Govt. boats ..	..	81	1,793	..	3,586 0 0	..	77	1,656	..	3,312 0 0
Do. for do. steamers ..	..	..	..	..	..	..	1	21	..	105 0 0
Do. for do. range boats.	..	11	..	..	165 0 0	..	11	..	..	165 0 0
Do. for cargo boats ..	..	942	18,225	..	36,184 0 0	..	1,054	19,874	..	38,623 8 0
Do. for passenger boats.	1st Class.	1	23	91	92 0 0	..	..	..	..	..
Do. do. do.	2nd Class.	130	1,736	7,469	5,162 0 0	2nd Class.	136	1,858	8,039	5,537 12 0
Do. do. Miscellaneous (including private or pleasure boats, duplicate license, &c.)	..	40	..	..	284 0 0	..	40	..	..	358 3 4
Tolls on cargo boats	..	..	..	..	1,840 0 0	..	..	..	..	2,342 8 0
Do. passenger boats	..	..	..	..	135 8 0	..	..	..	..	177 4 0
Do. Miscellaneous	..	..	..	..	55 8 0	..	..	..	..	60 0 0
Do. rafts (locks full)	..	4,340	..	..	3,800 8 4	..	4,989	..	..	4,988 14 6
Amount recovered from cargo boats men, being the sum paid to them on account of refunds made by mistake	..	..	..	..	11 0 0	..	..	..	..	..
Total ..	..	..	21,777	7,560	51,315 8 4	..	..	23,409	8,039	55,670 1 10

C.

STATEMENT showing the total Maintenance Charges on Navigable Canals of the Godávari Delta for 1880-81.

Description.	Total Charges for 1880-81.	Debitable to Navigation.		Debitable to Irrigation.	
		Rate.	Amount.	Rate.	Amount.
	RS.		RS.		RS.
Lock establishments	20,582	Whole.	20,582	...	...
Lock and lock weir repairs ...	20,344	Do.	20,344	...	...
Navigation buildings	743	Do.	743	...	...
Tow-path maintenance	3,258	Do.	3,258	...	...
Dredging	277	Do.	277	...	...
Share of canal maintenance ...	32,097	About $\frac{1}{4}$	8,683	About $\frac{3}{4}$	23,414
Miscellaneous (including any charges not appertaining to the first six items.)	8,895 *	...	1,219	...	7,676
	86,196	...	55,106	...	31,090

* This amount includes the following items :—

	RS.
Repairs to other masonry works	4,876
Do. to ferry boats	2,800
Restoration of Central Delta head-sluice	1,219
	8,895

One-fourth of the first item is charged to Navigation and the whole expenditure on the other two items is charged to Irrigation.—*Vide* Irrigation Chief Engineer's memorandum No. 5 G.D., 21st April 1881.

D.

MEMORANDUM showing the Offences against Rules and Bye-laws during the year 1881, and Punishments inflicted.

Nature and Description of Boats.	Years.	Bye-law No. 1. Mooring on Tow-path side.		Bye-law No. 6. Not giving way when met.		Bye-law No. 7. Not giving way.		Bye-law No. 8. Interfering with Locks and their Machinery.		Bye-law No. 9. Rafts being in excess of Dimensions.		Bye-law No. 10. Failing to produce License.		Bye-law No. 11. Not stopping when ordered.		Bye-law Nos. 5 and 12. Wrong mooring and without Light.		Bye-law No. 13. Not having Lights.		Bye-law No. 14. Not in proper repair.		Rule VII. For not carrying Passengers.		Rule No. 10. Numbers not being painted.	
		Boat Number.	Number of days stopped.	Boat Number.	Number of days stopped.	Boat Number.	Number of days stopped.	Boat Number.	Number of days stopped.	Boat Number.	Number of days stopped.	Boat Number.	Number of days stopped.	Boat Number.	Number of days stopped.	Boat Number.	Number of days stopped.	Boat Number.	Number of days stopped.	Boat Number.	Number of days stopped.	Boat Number.	Number of days stopped.	Boat Number.	Number of days stopped.
Passenger Boats.	1881.	24	3	51	4	40	10	50	7	..	..	..	..	151	3	..	..	127	5	26	4	143	15	3	10
	,,	..	..	..	..	..	..	129	7	..	..	..	..	27	15	..	..	12 114	4 7	27 151	15 11	..	..	..	..
	,,	..	..	..	..	..	..	115	7	..	..	..	..	..	..	..	..	96	7	48	3	..	..	..	..
	,,	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	50 31	7 4	..	..	..	..
	,,	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	25	4	..	..	..	..
	,,	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	34	4	..	..	..	..
	,,	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	50	4	..	..	..	..
	,,	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	17 54	4 4	..	..	..	..
	,,	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	106 17	5 8	..	..	..	..
Cargo Boats.	,,	..	..	..	..	..	..	..	..	..	..	..	..	..	..	209	4	..	..	..	..	..	..	..	..
	,,	175	5	45	4	..	..	..	..	..	..	..	..	..	..	365 366	3 3	..	..	502 K.	5	..	..	..	..
	,,	177	5	..	..	..	..	..	..	..	..	..	..	..	..	192	6	..	..	502 G.	5	..	..	..	..
	,,	220	5	..	..	..	..	..	..	1,449	15	1,197	7	..	..	467 192	6 6	..	..	..	..	..	..	..	..
	,,	248	3	..	..	..	..	..	..	1,475	15	..	..	..	..	239 143	12 6	..	..	..	..	..	..	1,143	10
	,,	332	5	..	..	..	..	..	..	..	..	..	..	..	..	144	5	..	..	..	..	..	..	..	..
	,,	1,298	5	..	..	..	..	..	..	..	..	..	..	..	..	848 177	5 8	..	..	..	..	..	..	..	..
	,,	1,932	3	..	..	..	..	..	..	..	..	..	..	..	..	23	8	..	..	..	..	..	..	..	..
	,,	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1,919	7	..	..	..	..	..	..	..	..
	,,	..	..	..	..	..	..	..	..	..	..	..	..	..	..	871 1,309	10 10	..	..	..	..	..	..	..	..
	,,	..	..	..	..	..	..	..	..	..	..	..	..	..	..	215	10	..	..	..	..	..	..	..	..
											Fresh Fee Fines. RS. A. P.														
Rafts	,,	..	..	..	..	..	..	..	..	2,120	9 4 0	..	..	..	..	..	..	..	..	..	..	..	..	..	..
	,,	..	..	..	..	..	..	..	..	2,125	15 0 0	..	..	..	..	..	..	..	..	..	..	..	..	..	..
	,,	..	..	..	..	..	..	..	..	2,121	2 12 0	..	..	..	..	..	..	..	..	..	..	..	..	..	..
	,,	..	..	..	..	..	..	..	..	2,118 2,131	15 8 0 31 0 0	..	..	..	..	..	..	..	..	..	..	..	..	..	..
	,,	..	..	..	..	..	..	..	..	2,533	6 12 0	..	..	..	..	..	..	..	..	..	..	..	..	..	..
		8	..	2	..	1	..	3	..	2 boats. 6 rafts.	..	1	..	2	..	16	..	4	..	15	..	1	..	2	..

(Signed) J. C. LARMINIE,
Executive Engineer, in charge First Circle.

No. 5-A.

From J. C. LARMINIE, Esq., Executive Engineer in charge First Circle, to the Chief Engineer for Irrigation, dated Dowlaishweram, 2nd October 1882, No. 1553 G.D.

With reference to your memorandum No. 1-75 G.D. of the 25th July 1882, I have the honor to inform you that the increase in the Navigation "receipts" in 1881, was due to more boats, &c., having been licensed in 1881 than in 1880, while that under "charges" was due to (1) extensive repairs done to locks and weirs on Cocanada, Bank and Amalapur Canals, and Rs. 964 spent in improving slopes of main duct, Eastern Division, in 1880-81 than in 1879-80; (2) new gates made to Manjair and Pasalapudi locks in the Eastern Division; (3) construction of establishment sheds in 1880-81 in the Western Division; (4) more money * spent on lock and lock weirs and channels in 1880-81 than in 1879-80 in the Western Division.

* Rs. 1,639.

2. The cost of mile coolies entertained in the three deltas in 1880-81 has been partly charged to Navigation, and this also enhanced the charge under Navigation.

No. 110 I.

Endorsement on the above.

Submitted to Government.

2. The statements of navigation receipts and charges for 1881 for the Godávari Delta show the following results as compared with those of 1880:—

	1880.	1881.
Charges.	RS.	RS.
Lock establishment	21,153	20,582
Lock and lock weir repairs.	17,505	20,344
Navigation buildings	106	743
Tow-path maintenance	11	3,258
Dredging	1,020	277
Share of canal maintenance	6,169	8,683
Miscellaneous	1,343	1,219
Total ...	47,207	55,106
Interest	28,994	24,504
Total charges	76,301	79,610
Receipts.		
License fees on Government boats	3,586	3,312
" " steamers	...	105
" " range boats	165	165
" " passenger boats ...	5,254	5,538
" " cargo boats	36,195	38,623
" " Miscellaneous	2,292	358
Tolls on cargo boats	...	2,343
" passenger boats	...	177
" Miscellaneous	23	60
" rafts	3,800	4,989
Total ...	51,315	55,670
Loss	24,986	23,940

That is, the receipts more than paid the working expenses, but failed to cover the charge for interest on capital outlay on the navigation works.

3. The increase in the navigation receipts is due to a larger number of boats having been licensed in 1881 than in 1880. There has also been an increase in the charges owing to extensive repairs to several locks and weirs.

4. The number of offences committed during the year against Navigation Rules and Bye-laws for which punishment was awarded was 63, and of these 8 were for mooring on tow-path sides, 16 for wrong mooring and want of lights, and 15 for want of repairs to the boats.

CHEPAUK,
1st November 1882.

(Signed) A. S. RUSSELL,
for Acting Chief Engineer for Irrigation.

To the Joint Secretary to Government,
Public Works Department, Irrigation Branch.

No. 6.

ORDER—dated 3rd November 1882, No. 894 I., Public Works.

Recorded.

(True Extract.)

(Signed) J. O. HASTED, Colonel, R.E.,
Ag. Joint Secy. to Govt., P.W.D.,
Irrigation Branch.

To the Superintending Engineer, First Circle.
" " Second Circle.
" " Fifth Circle.
" Chief Engineer for Irrigation.
" Examiner, Public Works Accounts.
" Revenue Department.

IRRIGATION.
ACCOUNT.

Govt. of {1882} Madras.

PUBLIC WORKS.

Dated November, 3rd.

Recd. *Encl.*

G.O., 3rd Nov. 1882, No. 894 I.

NOVEMBER

Nos. 5-6.

Navigation Receipts and Charges for 1881 for the Godavari Delta.

Note by the Chief Engineer for Irrigation submitting statements of —, recorded.

GOVERNMENT OF MADRAS.

PUBLIC WORKS DEPARTMENT.

Irrigation.

No. 7.

READ—the following papers:—

G.O., dated 25th October 1882, Mis. No. 3525, Revenue.

Read—the following Proceedings of the Board of Revenue, dated 12th October 1882, No. 2487:—

From H. P. GORDON, Esq., Collector of Bellary, to the Secretary to the Board of Revenue, dated 4th October 1882, No. 3410.

As directed in Board's Proceedings, No. 951, of the 30th of March 1882, I have the honor to forward herewith a statement, in the form therein prescribed, showing the amount required for the repairs to minor irrigation works in the new district of Bellary.

2. In G.O., No. 327 I., dated 10th April 1882, communicated with Board's Proceedings, No. 1063, dated 19th idem, 7,000 rupees were allotted for the repair of the minor irrigation works in the old Bellary District.

3. In my letter, No. 2443, dated the 17th July last, I informed the Board that there was no objection to the transfer of one half of the above sum to the district of Anantapur.

4. Out of the other half of the sanctioned amount, Rs. 2,371-10-3 have already been allotted for the works mentioned in the enclosed list. There is therefore a balance of Rs. 1,128-5-9 still available for expenditure.

5. The additional amount now required as detailed in the accompanying statement is Rs. 6,536-12-11.

6. I regret the delay that has occurred in the submission of this reply. Board's Proceedings, No. 1679, of the 30th June 1882, which directs that five years' average should be shown in the fourth column of the statements herewith sent was received on the 2nd August 1882. Divisional Officers were at once asked to furnish the information, and the last reply from the Head Assistant Collector was received only on the 29th ultimo.

Resolution—dated 12th October 1882, No. 2487.

Submitted for the favorable consideration of Government.

2. The cost of repairing the works for which allotments have not yet been made is estimated at Rs. 6,536-12-11. To meet this the Collector has in hand Rs. 1,128-5-9 and asks for a grant of the balance, viz., Rs. 5,408-7-2.

(A true Copy and Extract.)

(Signed) E. GIBSON,
Acting Secretary.

Order—dated 25th October 1882, Mis. No. 3525, Revenue.

Transferred to the Public Works Department, Irrigation Branch.

(Signed) E. F. WEBSTER,
Secretary to Government.

No. 111 I.

Endorsement on the above.

Submitted to Government.

2. The amount provided for repairs to minor irrigation works in the old Bellary District was Rs. 7,500, as shown in Schedule C of the budget estimates for irrigation and navigation and agricultural works, communicated with G.O., No. 408 I., dated 26th May 1882. Rs. 3,500 having been transferred to the Anantapur District, the existing grant for the new Bellary District is Rs. 4,000. Deducting Rs. 2,371-10-3, the amount already allotted to individual works, the balance available is Rs. 1,628-5-9.

2. The Collector proposes to spend Rs. 6,536-12-11 on repairs to twelve works, the average and ayacut revenue of the works being Rs. 1,613 and 2,552 respectively. The cost of repairs is very high compared with Revenue, and the additional grant applied for cannot be recommended. The balance of reserve under this head is only Rs. 1,935.

CHEPAUK,
1st November 1882.

(Signed) A. S. RUSSELL,
for Ag. Chief Engineer for Irrigation.

To the Joint Secretary to Government, Public Works Department, Irrigation Branch.

No. 8.

ORDER—dated 4th November 1882, No. 895 I., Public Works.

The existing grant for repairs to minor irrigation works in the Bellary District cannot be increased, as the proposed expenditure is nearly four times the average revenue of the works.

(True Extract.)

(Signed) J. O. HASTED, Colonel, R.E.,
Ag. Joint Secy. to Govt., P.W.D.,
Irrigation Branch.

To the Chief Engineer for Irrigation.
" Collector of Bellary.
" Board of Revenue, with two lists.
" Revenue Department.
" Superintending Engineer, Third Circle.
" Examiner, Public Works Accounts.

IRRIGATION.

Govt. of (1882) Madras.

PUBLIC WORKS.

Dated November, 4th.

Recd. *Encl.*

G.O., 4th Nov. 1882, No. 895 I.

NOVEMBER.

Nos. 7-8.

Minor Irrigation Works, Bellary District.

Stating that the grant for repairs to — cannot be increased.

GOVERNMENT OF MADRAS.

PUBLIC WORKS DEPARTMENT.

Irrigation.
Account.

No. 9.

READ—the following:—

No. 112 I.

Note by the Acting Chief Engineer for Irrigation.

The following report on the expenditure incurred on the works of the late Madras Irrigation and Canal Company, for the quarter ended 31st December, 1881, is submitted to Government.

2. The net expenditure during the period under review was Rs. 11,025-12-3, as compared with Rs. 12,013-15-3 during the previous quarter, the outlay to the end of December 1881 being Rs. 1,16,97,512-10-6.

3. The following is a statement of the items on which outlay was incurred:—

Name of Section or of Work.	Net Outlay. RS.	A.	P.	Nature of Expenditure.	RS.	A.	P.
Main Canal, First Section	52	10	3				
Do. Second do.	1,374	9	2				
Do. Third do.	306	1	1				
Do. Fifth do.	10	0	0				
Do. Sixth do.	466	8	0	Cash ...	10,510	11	10
Do. Seventh do.	338	5	8	Stores ...	515	0	5
Do. Eighth do.	4	0	0				
Contingencies	0	7	0	Total ...	11,025	12	3
Distribution, Sixth and Seventh Sections.	893	15	3				
Navigation	8,917	11	9				
Completed works	—1,338	7	11				
Total ...	11,025	12	3				

4. The following statement shows the expenditure on all works from the commencement to the close of the quarter compared with sanctioned estimates:—

Works.	Amount of Estimate.	Expenditure: Up to 30th September.	Expenditure: During the Quarter ended 31st December 1881.	Total Expenditure.	Add Amount transferred to this from other works.	Deduct refund from this to other Works.	Total Net Expenditure.	Balance of Estimate.	Increase of Expenditure.
	RS. A. P.	RS. A. P.	RS. A. P.	RS. A. P.	RS. A. P.	RS. A. P.	RS. A. P.	RS. A. P.	RS. A. P.
Main Canal.									
First Section, 17½ miles	10,382 0 0	8,306 7 5	52 10 3	8,359 1 8	..	..	8,359 1 8	2,022 14 4	..
Second ,, 18th to 32nd miles ..	2,786 9 0	2,506 10 8	1,374 9 2	3,881 3 10	..	..	3,881 3 10	..	1,094 10 10
Third ,, 33rd to 43rd ,, ..	1,536 13 1	231 12 8	..	231 12 8	..	..	231 12 8	1,305 0 5	..
Fourth ,, 44th to 60th ,, ..	510 1 0	147 10 0	306 1 1	453 11 1	..	..	453 11 1	56 5 11	..
Fifth ,, 61st to 72nd ,, ..	468 11 10	175 15 0	10 0 0	185 15 0	..	..	185 15 0	282 12 10	..
Sixth ,, 73rd to 92nd ,, ..	4,985 13 6	2,137 7 4	466 8 0	2,603 15 4	..	..	2,603 15 4	2,381 14 2	..
Seventh ,, 93rd to 113th ,, ..	2,182 1 6	101 6 0	338 5 8	439 11 8	..	..	439 11 8	1,742 5 10	..
Eighth ,, 114th to 143rd ,, ..	2,050 0 0	1,837 10 2	4 0 0	1,841 10 2	..	..	1,841 10 2	208 5 10	..
Ninth ,, 144th to 178th ,, ..	700 15 3	375 13 2	..	375 13 2	..	..	375 13 2	325 2 1	..
Tenth ,, 179th to 186th ,, ..	80 15 10	84 5 9	..	84 5 9	..	..	84 5 9	..	3 5 11
Contingencies	1,519 14 10	274 10 6	0 7 0	275 1 6	..	..	275 1 6	1,244 13 4	..
Total ..	27,203 15 10	10,179 12 8	2,552 9 2	18,732 5 10	..	..	18,732 5 10	9,569 10 9	1,098 0 9
Distribution.									
Sixth and Seventh Sections	2,810 0 0	990 0 4	893 15 3	1,883 15 7	..	..	1,883 15 7	926 0 5	..
Navigation.									
Telegraph complete	8,400 0 0	764 8 3	248 13 1	1,013 5 4	..	..	1,013 5 4	7,386 10 8	..
First Section	600 0 0	164 4 11	198 3 9	362 8 8	..	..	362 8 8	237 7 4	..
Fourth ,, ...	1,000 0 0	726 1 10	134 8 9	860 10 7	..	..	860 10 7	139 5 5	..
Fifth ,, ...	150 0 0	2 8 0	35 3 0	37 11 0	..	..	37 11 0	112 5 0	..
Sixth ,, ...	1,174 11 8	101 3 0	43 8 0	144 11 0	..	..	144 11 0	1,130 0 8	..
Seventh ,, ...	2,414 5 2	297 7 4	332 12 1	630 3 5	..	..	630 3 5	1,784 1 9	..
Eighth ,, ...	2,546 3 5	3,789 9 0	463 2 1	4,252 11 1	..	..	4,252 11 1	..	1,706 7 8
Ninth ,, ...	388 9 3	1,648 7 9	110 13 5	1,759 5 2	..	..	1,759 5 2	..	1,370 11 11
Tenth ,, ...	15,736 0 0	10,184 9 6	7,332 12 7	17,517 6 1	..	..	17,517 6 1	..	1,781 6 1
Contingencies	..	605 9 11	17 15 0	623 8 11	..	..	623 8 11	..	623 8 11
Total ..	32,409 13 6	18,284 5 6	8,917 11 9	27,202 1 3	..	..	27,202 1 3	10,689 14 10	5,482 2 7
Total ..	62,423 13 4	29,454 2 6	12,364 4 2	47,818 6 8	..	..	47,818 6 8	21,185 10 0	6,580 3 4
Completed Works	*1,16,49,694 3 10	1,16,51,032 11 9	—1,338 7 11	1,16,49,694 3 10	..	..	1,16,49,694 3 10	..	..
Grand Total ..	1,17,12,118 1 2	1,16,80,486 14 3	11,025 12 3	1,16,97,512 10 6	..	..	1,16,97,512 10 6	21,185 10 0	6,580 3 4

* The balance of the estimates having lapsed under G.O., No. 804 I., dated 11th December 1880, the expenditure has been taken as the amount of the estimates.

5. Under G.O., No. 88 I., dated 3rd February 1881, the entire charge for establishment excepting a small sum of Rs. 16-12-0 on account of premium on Treasury bills was debited to Revenue Account.

Chepauk,
2nd November 1882.

(Signed) J. O. HASTED, Colonel, R.E.,
Acting Chief Engineer for Irrigation.

To the Joint Secretary to Government, Public Works Department, Irrigation Branch.

No. 10.

Order—dated 7th November 1882, No. 898 I., Public Works.

Ordered that this report be forwarded to the Home Government.

(True Extract.)

(Signed) J. O. HASTED, Colonel, R.E.,
Ag. Joint Secy. to Govt., P.W.D.,
Irrigation Branch.

To the Superintending Engineer, Third Circle.
" Chief Engineer for Irrigation, with five enclosures.
" Examiner, Public Works Accounts.

IRRIGATION.
ACCOUNT.

Govt. of {1882} Madras.

PUBLIC WORKS.

Dated November, 7th.

Recd. *Encl.*

G.O., 7th Nov. 1882, No. 898 I.

NOVEMBER.

Nos. 9-10.

Madras Irrigation and Canal Company.

Ordered that the Progress Report of the — for the quarter ended 31st December 1881 be forwarded to the Home Government.

PUBLIC WORKS DEPARTMENT.

No. 11.

LETTER—to

THE MOST HONORABLE THE SECRETARY OF STATE FOR INDIA.

MY LORD MARQUIS,

We have the honor to forward the accompanying report on the progress of the work of the Madras Irrigation and Canal Company for the quarter ended 31st December 1881.

We have the honor to be,
My Lord Marquis,
Your Lordship's most obedient, humble servants,

(Signed) M. E. GRANT DUFF.
(„) FRED. ROBERTS.
(„) DAVID F. CARMICHAEL.
(„) H. E. SULLIVAN.

(True Copy.)

(Signed) J. O. HASTED, Colonel, R.E.,
Ag. Joint Secy. to Govt., P.W.D.,
Irrigation Branch.

FORT ST. GEORGE,
7th November 1882.

GOVT. OF MADRAS.

PUBLIC WORKS DEPARTMENT.

(Copy.)

LETTER to the Most Honorable the Secretary of State for India.

No. $\frac{46}{899}$ I., dated 7th Nov. 1882.

FORWARDING the Progress Report of the Madras Irrigation and Canal Company for the quarter ended 31st December 1881.

GOVERNMENT OF MADRAS.

PUBLIC WORKS DEPARTMENT.

Irrigation.
Account.

No. 12.

READ—the following letter from J. W. RUNDALL, Esq., Superintending Engineer, Second Circle, to the Chief Engineer for Irrigation, dated Masulipatam, 26th September 1882, No. 642 S.G. :—

I have the honor to forward, for your approval and the eventual sanction of Government, a detailed abstract of items requiring sanction under the sub-head "O. Miscellaneous" of I Head works of the Sangam Project.

1 Detailed Abstract.
2 Estimates for mortar troughs and bricklayer's levels.
1 Bill for medicines.

2. The detailed estimate now forwarded is for Rs. 8,602 out of the total of Rs. 40,635, the amount of the sub-head as sanctioned.

3. Most of the entries are lump sum entries, expenditure having been incurred without the previous sanction of detailed estimates by the Executive Engineer.

4. I think also it is open to question whether some of the items form a legitimate charge against this item, and should not more properly be charged to other items of the sanctioned estimate, *e.g.*, batta for work-people from other districts. The difficulty in charging an item of this kind off to work, is to proportion the charges against the works on which the men are employed.

5. The item mortar mills, and mortar and surkhi ground, does not seem to me a proper charge against Miscellaneous. The cost of the mortar mills should be charged to Tools and Plant, laying out the ground, to the cost of mortar used on the work.

6. Mortar troughs and bricklayer's levels seem more properly chargeable to Tools and Plant, but inasmuch as these are perishable articles, which certainly will not be in good condition at the end of the work, they might on this ground be charged to Miscellaneous.

7. The other item seem to me legitimate charges against Miscellaneous.

8. Instead of an estimate a bill for the medicine received is forwarded.

No. 13.

ORDER—dated 8th November 1882, No. 903 I., Public Works.

The cost of the mortar mills will be charged to Tools and Plant, and the expenditure incurred in laying out the ground will be debited to the cost of mortar used on the work.

2. The estimate of miscellaneous charges, amounting to Rs. 7,494, is sanctioned, against the lump sum, Rs. 40,635, provided for the purpose in the estimate for head works connected with the Sangum Project, sanctioned in G.O., No. 471 I., dated 15th June 1882.

3. This sanction has been registered as No. 41 I. of 1882-83.

(True Extract.)

(Signed) J. O. HASTED, Colonel, R.E.,
Ag. Joint Secy. to Govt., P.W.D.,
Irrigation Branch.

To the Superintending Engineer, Second Circle.
" Chief Engineer for Irrigation, with three enclosures.
" Examiner, Public Works Accounts, with Abstract Estimate.
" Revenue Department.
" Board of Revenue.

IRRIGATION.
ACCOUNT.

Govt. of (1882) Madras.

PUBLIC WORKS.

Dated November, 8th.

I ecd. *Encl.*

G.O., 8th Nov. 1882, No. 903 I.

NOVEMBER.
Nos. 12-13.

Sangum Project.

Sanctioning certain miscellaneous charges connected with the head works for the —.

GOVERNMENT OF MADRAS.

PUBLIC WORKS DEPARTMENT.

Irrigation.
Account.

No. 14.

READ—the following letter from Major G. F. L. MARSHALL, R.E., Under Secretary to the Government of India, Public Works Department, (Civil Works—Irrigation,) to the Secretary to the Government of Madras, Public Works Department, dated Simla, 23rd October 1882, No. 389 I. :—

With reference to your telegrams of the 15th and 28th September 1882, I am directed to communicate the sanction of the Government of India to an expenditure of Rs. 1,16,661 on the Kurnool Canal Division from the date the works were taken over from the Madras Irrigation and Canal Company to the end of the current official year, the whole chargeable to the Revenue Account.

No. 15.

ORDER—dated 8th November 1882, No. 904 I., Public Works.

Communicated to the officers concerned.

2. The amount applied for was Rs. 1,15,661, and not Rs. 1,16,661. The Government of India will be requested to reduce the sanction accordingly.

3. Ordered that a copy of these Proceedings be forwarded to the Government of India.

(Here enter No. 905 I., dated 8th November 1882.)

(True Extract.)

(Signed) J. O. HASTED, Colonel, R.E.,
Ag. Joint Secy. to Govt., P.W.D.,
Irrigation Branch.

To the Superintending Engineer, Third Circle.
" Chief Engineer for Irrigation.
" Examiner, Public Works Accounts.

No. 16.

ENDORSEMENT—dated 8th November 1882, No. 905 I., Public Works.

Forwarded.

(Signed) J. O. HASTED, Colonel, R.E.,
Ag. Joint Secy. to Govt., P.W.D.,
Irrigation Branch.

IRRIGATION.
ACCOUNT.

Govt. of {1882} Madras.

PUBLIC WORKS.

Dated November, 8th.

Recd. *Encl.*

G.O., 8th Nov. 1882, No. 905 I.

NOVEMBER.
Nos. 14–16.

Kurnool Canal Division.

Pointing out that the sanction for expenditure on the — should be Rs. 1,15,661 instead of Rs. 1,16,661.

GOVERNMENT OF MADRAS.

PUBLIC WORKS DEPARTMENT.

Irrigation.
Account.

No. 17.

READ—the following letter from G. T. WALCH, Esq., Officiating Superintending Engineer, First Circle, to the Chief Engineer for Irrigation, dated Dowlaishweram, 28th October 1882, No. 1744 G.D. :—

I have the honor to enclose an estimate * for a double trap punt similar to, but slightly stronger in some parts than, the punts sanctioned in G.O., No. 216 I., dated 15th March 1878, which have proved a success.

* Rs. 4,060.

2. There is much dredging to be done in the river in keeping open approaches to head locks and channels through shoals, for which work these punts are peculiarly suited, and I am convinced that another one is wanted.

3. Considering the work for which the punt is specially required, I consider its cost would be properly chargeable to Tools and Plant, *Revenue Account*, *New Supplies*, and, if you approve, I request a transfer to that head of Rs. 4,060 from Rs. 13,014 † allotted in the budget under Revenue Account, Tools and Plant, Repairs and Carriage, Eastern Division.

† Original Rs. 14,514 reduced by Rs. 1,500 transferred to Western Division—See G.O., No. 750 I., dated 12th September 1882.

4. I am so anxious to commence the punt as early as possible that I trust you will telegraph to me if it may be gone on with.

No. 18.

ORDER—dated 9th November 1882, No. 906 I., Public Works.

The estimate, amounting to Rs. 4,060, for constructing a dredge punt with double trap for the Godávari Delta, is sanctioned as follows:—

Productive Public Works.
Revenue Account.
Godávari Delta System.
Tools and Plant.
Special Plant.
12. Miscellaneous.
Floating Plant.
New Supplies.

		RS.
Constructing a dredge punt with double trap.	Estimate	4,060

2. The amount of the estimate is allotted, by transfer, from the current year's grant for maintenance of the floating plant in the Godávari Eastern Division.

3. The following telegram will be sent to the Superintending Engineer, First Circle :—

"Construction of double trap punt sanctioned."

4. This sanction is registered as No. 42 I. of 1882-83.

(True Extract.)

(Signed) J. O. HASTED, Colonel, R.E.,
Ag. Joint Secy. to Govt., P.W.D.,
Irrigation Branch.

To the Superintending Engineer, First Circle.
" Chief Engineer for Irrigation.
" Examiner, Public Works Accounts, with Abstract Estimate.

IRRIGATION.
ACCOUNT.

Govt. of (1882) Madras.

PUBLIC WORKS.

Dated November, 9th.

Recd. *Encl.*

G.O., 9th Nov. 1882, No. 906 I.

NOVEMBER.

Nos. 17-18.

Dredge Punt.

Sanctioning an estimate, amounting to Rs. 4,060, *for constructing a* — for the Godávari Delta.

GOVERNMENT OF MADRAS.

PUBLIC WORKS DEPARTMENT.

Irrigation.
Account.

No. 19.

READ—the following letter from J. W. RUNDALL, Esq., Superintending Engineer, Second Circle, to the Chief Engineer for Irrigation, dated Pedda Ganjam, 7th October 1882, No. 1274 K.S. :—

I have the honor to forward, herewith, revised Schedule A showing the component works of the Budget Item No. 27 for 1882-83 (Commamur canal), and to request that the same may be sanctioned and substituted for the one printed in budget.

2. This schedule is for Rs. 3,200 more than the budget allotment for the Commamur canal, which I request you will be good enough to transfer from Item 24* of the schedule of the Eastern Section.

* Polraz drain; Sub-head, C. Works.

3. The sums entered under "Amount of estimate" in this schedule are those given in the revised estimate for the Commamur canal, which has, I hope, been formally approved of.

ENCLOSURE.

CHARGES—MADRAS PRESIDENCY.

IRRIGATION, PRODUCTIVE PUBLIC WORKS—GOVERNMENT OF MADRAS.

SCHEDULE A showing the Component Works of the Budget Item No. 27 for 1882-83.

Item No.	Main Head.	Name of Canal.	Sub-head.	Individual work.	Amount of Estimate.	Outlay: To end of 1880-81.	Outlay: To end of 1881-82.	Grant for 1882-83.	Item Total.
				38. PRODUCTIVE PUBLIC WORKS, CAPITAL ACCOUNT.	RS.	RS.	RS.	RS.	
				KISTNA DELTA SYSTEM.					
				Western Section.					
27	(2) Main canals and branches.	Commamur canal.	B. Land ..	Compensation for land for improvements to Commamur canal ..	7,780	..	2,679	4,000	
				Do. for Emileru diversion	900	..	..	900	
				Do. for new cut from Guntúr nallah to culvert	875	..	..	875	
				Do. for stop bank between Alleru and Apperu.	720	..	..	720	
				Do. for Apperu outfall channel	170	..	..	170	

Schedule A showing the Component Works of the Budget Item No. 27 for 1882-83—*cont.*

Item No.	Main Head.	Name of Canal.	Sub-head.	Individual work.	Amount of Estimate.	OUTLAY To end of 1880-81.	OUTLAY To end of 1881-82.	Grant for 1882-83.	Item Total.
				38. PRODUCTIVE PUBLIC WORKS, CAPITAL ACCOUNT—*cont.*	RS.	RS.	RS.	RS.	
				KISTNA DELTA SYSTEM—*cont.*					
				Western Section—cont.					
27	(2) Main canals and branches —*cont.*	Commamur canal—*cont.*	F. River and hill torrent works.	Kollimerla outlet ..	4,670	..	2,866	1,804	
				Do. inlet ..	2,800	..	1,597	1,203	
				Alleru do. ..	3,190	..	3,080	125	
				Faringidibba outlet ..	8,990	..	6,186	2,804	
				Nallamada do. ..	6,800	1,269	3,231	2,300	
				Sluices in Apperu outlet.	2,790	..	1,939	851	
				Guntúr nallah surplus weir and culvert ..	21,280	..	7,332	13,948	
				Nallamada surplus sluices improvements ..	3,625	..	..	2,500	
				Purchurvagu surplus sluices	2,220	..	..	1,000	
				Karenchedu outlet ..	3,830	..	..	1,500	
			F. (1) Other cross drainage works.	Karenchedu aqueduct ..	11,940	..	..	5,000	
			G. Bridges ..	Bridge over Commamur canal on Inkollu road.	9,607	..	890	3,500	
			I. Navigation.	Santaravur lock ..	32,870	26,006	..	3,200	
			..	Nallamada do. ..	27,430	12,095	14,010	425	
			L. Earthwork.	Improvements to Commamur canal	2,80,590	43,403	12,475	6,468	
				New cut from Guntúr nallah to culvert ..	2,330	..	..	1,500	
				Emileru diversion bank.	4,917	..	1,224	3,693	
				Outfall channel from Apperu sluices to Romperu.	15,650	..	..	4,714	
									63,200

24th September 1882.

(Signed) G. D. WYBROW,
Executive Engr., Kistna Western Division.

No. 20.

ORDER—dated 9th November 1882, No. 907 I., Public Works.

The revised Schedule A, amounting to Rs. 63,200, for works on the Commamur canal, is sanctioned in supersession of the one amounting to Rs. 60,000, printed with the budget estimates for the current year. The difference, Rs. 3,200, will be met by the following reductions of allotments :—

Kistna Eastern Division.

	RS.
Polraz drain (Budget Item No. 24)	1,888
Establishment at 23 per cent. on Rs. 6,655, the allotment for compensation for land required for the Commamur canal	1,231
Tools and Plant at 1½ per cent. on do. do.	81
Total ...	3,200

(True Extract.)

(Signed) J. O. HASTED, Colonel, R.E.,
Ag. Joint Secy. to Govt., P.W.D.,
Irrigation Branch.

To the Superintending Engineer, Second Circle.
" Chief Engineer for Irrigation.
" Examiner, Public Works Accounts.
" Revenue Department.

IRRIGATION.
ACCOUNT.

Govt. of (1882) Madras.

PUBLIC WORKS.

Dated November, 9th.

Recd. *Encl.*

G.O., 9th Nov. 1882, No. 907 I.

NOVEMBER.

Nos. 19-20.

Commamur Canal.

Revised Schedule A, amounting to Rs. 63,200, *for works connected with the* — sanctioned with remarks.

GOVERNMENT OF MADRAS.

PUBLIC WORKS DEPARTMENT.

Irrigation.

No. 21.

READ—the following paper:—

Office Note from the Examiner, Public Works Accounts, dated 1st November 1882, No. 636.

No. 22.

ORDER—dated 9th November 1882, No. 908 I., Public Works.

As the Madras Water-supply and Irrigation Extension Project has, under G.O., No. 819 I., dated 16th October 1882, been classed under Works for which Capital and Revenue Accounts are kept, Mr. W. Wilson will see that Revenue Accounts of this project are prepared in the same forms as those adopted for other irrigation systems.

(True Extract.)

(Signed) J. O. HASTED, Colonel, R.E.,
Ag. Joint Secy. to Govt., P.W.D.,
Irrigation Branch.

To Wilson, Esq.
To the Chief Engineer for Irrigation.
" Examiner, Public Works Accounts.
" Superintending Engineer, Fifth Circle.
" Revenue Department.
" Board of Revenue.
" Collector of Chingleput.

IRRIGATION.

Govt. of {1882} Madras.

PUBLIC WORKS.

Dated November, 9th.

Recd. *Encl.*

G.O., 9th Nov. 1882, No. 908 I.

NOVEMBER.

Nos. 21-22.

Madras Water-supply and Irrigation Extension.

Mr. Wilson directed to prepare the Revenue Accounts for the — in the same form as those for the other systems.

GOVERNMENT OF MADRAS.

PUBLIC WORKS DEPARTMENT.

Irrigation.
Account.

No. 23.

READ—the following paper :—

No. 564 T.N.

Report by Superintending Engineer, Sixth Circle, on estimate for Rs. 605 for providing falling shutters to one bay and one tambogy of Korampalem Tank surplus weir.

Four Plans.
One Estimate.

With letter No. 175 T.N., dated 5th June 1882, the Superintending Engineer, Sixth Circle, forwarded plans and estimates for providing the surplus weir of Korampalem tank with falling shutters, and proposed (paragraph 7) that two bays and two tambogy vents should be fitted as an experiment.

2. The Chief Engineer for Irrigation in his memorandum No. VI/41 T.N. generally approved of the proposal, and directed that an estimate should be prepared for fitting one bay and one tambogy with falling shutters, and also requested that the design should be slightly modified.

3. The plans and estimate now forwarded have been prepared by the Executive Engineer and are submitted for sanction. They are similar to the former ones, but have, as suggested, the working parts increased in size.

4. The Superintending Engineer considers the experiment worth trying, and requests that it may be sanctioned; he considers, however, that, in the design now forwarded, the grooves for the plank shutters to rest in $1\frac{1}{4}$ inches (increased from 1 inch) is not sufficient, and would suggest that it be made $2\frac{1}{2}$ inches, and also that the shoulder for the falling shutter to rest against be made 2 inches in place of $\frac{3}{4}$ inch. The extra cost of this would be but small.

5. He also considers that there will be extra expense in doing a small work of this sort, and that sanction for Rs. 700 should be given, and that this should be met from the provision to be made in the estimate for unforeseen work.

TRICHINOPOLY,
28th October 1882.

(Signed) H. R. MEAD, Lt.-Col., R.E.,
Superintending Engineer, Sixth Circle.

No. 24.

ORDER—dated 9th November 1882, No. 909 I., Public Works.

The alterations suggested by the Superintending Engineer are approved, and the estimate, as corrected, amounting to Rs. 700, for providing the surplus weir of Korampalem tank with falling shutters, is sanctioned against the lump sum provision of Rs. 25,000 made in the revised estimate for the Srívaikuntham Anicut Project, the Government of India having granted permission to proceed with the project works in anticipation of the sanction of the Secretary of State. The balance of the lump sum provision still available is Rs. 19,562, as shown in the margin.

	RS.
Lump sum provision	25,000
Estimate sanctioned in G.O., No. $\frac{836}{A}$ I. of 19th October 1882	4,738
Estimate now sanctioned	700
	5,438
Balance ...	19,562

2. The classification of the estimate is as shown below :—

Productive Public Works.
Capital Account.
Srívaikuntham Anicut System.
Northern Section.
(2) Main Canals and Branches.
N. Tanks and Reservoirs.
Korampalem Tank Surplus Weir.
Providing falling shutters. Estimate ... ... Rs. 700.

This sanction has been registered as No. 43 I. of 1882-83.

(True Extract.)

(Signed) J. O. HASTED, Colonel, R.E.,
Ag. Joint Secy to Govt., P.W.D.,
Irrigation Branch.

To the Superintending Engineer, Sixth Circle.
" Chief Engineer for Irrigation, with seven enclosures.
" Examiner, Public Works Accounts.
" Revenue Department.
" Board of Revenue.

IRRIGATION.
ACCOUNT.

Govt. of {1882} Madras.

PUBLIC WORKS.

Dated November, 9th.

Recd. *Encl.*

G.O., 9th Nov. 1882, No. 909 I.

NOVEMBER.

Nos. 23-24.

Korampalem Tank Surplus Weir.

The estimate amounting to Rs. 700 *for alterations and additions to the* —, sanctioned.

GOVERNMENT OF MADRAS.

PUBLIC WORKS DEPARTMENT.

Irrigation.
Account.

No. 25.

READ—the following paper :—

No. 1286 T.J.

REPORT by Superintending Engineer, Sixth Circle, on estimate for screw shutters for the Adappaur Dam and the North and South Rajen Channels in Tiruturaipúndi Taluk.

For the better regulation of the water it has been for some years proposed to have screw shutters, &c., for this work, and in 1879 sanction was given for Rs. 2,420 for this work by the Superintending Engineer and registered as No. 71 of 22nd September 1879.

One Survey of site for Pamaniar Head Works.
,, Survey of North and South Rajen Channels.
Three Longitudinal and Cross Sections of North and South Rajen Channels.
One Plan of Adappaur dam at Pamany.
,, Plan of North and South Rajen Head Sluices.
One Revised Estimate.
,, Classified Abstract.
,, Comparative Statement.
,, Duplicate Abstract.
Five Plans sent separately.

2. On a reference being made to the Chief Engineer he ordered them to be revised, and in his memorandum, No. $\frac{\text{III}}{\text{102 T.J.}}$, dated 25th November 1880, he gave detailed instructions regarding the revised plans and estimates.

3. These instructions have been carried out; the revised estimate amounts to Rs. 3,620, and for this sanction is asked.

4. The work is an important one, and should be completed as soon as practicable. A sum of Rs. 1,856-2-8 has been incurred on the original sanction; therefore an allotment of Rs. 1,770 is required to complete the work. Of this, if possible, Rs. 700 should be given this official year, and the balance Rs. 1,070 in 1883-84, so that the work may be completed by the 1st July 1883.

TRICHINOPOLY,
19th October 1882.

(Signed) H. R. MEAD, Lieut.-Col., R.E.,
Superintending Engineer, Sixth Circle.

No. 26.

ORDER—dated 9th November 1882, No. 910 I., Public Works.

The revised estimate, amounting to Rs. 3,620, for fitting screw shutters to the Adappaur dam and the North and South Rajen Voikal channel head sluices, is sanctioned as follows :—

Productive Public Works.
Revenue Account.
Cauvery Delta System.
Extension and Improvements.
(3) Distributaries.
C. Works.

	RS.
Adappaur dam, North and South Rajen Voikal channel head sluices. Fitting screw shutters. Estimate	3,620

2. Rs. 700 required for expenditure on the work during the current year, or Rs. 872, including the percentage charges for establishment and tools and plant, are appropriated from the balance of reserve held at the disposal of Government under Productive Public Works, Revenue Account.

3. This sanction has been registered as No. 44 I. of 1882-83.

(True Extract.)

(Signed) J. O. HASTED, Colonel, R.E.,
Ag. Joint Secy. to Govt., P.W.D.,
Irrigation Branch.

To the Superintending Engineer, Sixth Circle.
" Chief Engineer for Irrigation, with ten enclosures.
" Examiner, Public Works Accounts, with Abstract Estimate.
" Revenue Department.
" Board of Revenue.

IRRIGATION.
ACCOUNT.

Govt. of {1882} Madras.

PUBLIC WORKS.

Dated November, 9th.

Recd. *Encl.*

G.O., 9th Nov. 1882, No. 910 I.

NOVEMBER.

Nos 25-26.

Screw Shutters.

The Revised Estimate for fitting — to the Adappaur dam and the North and South Rajen Voikal channel head sluices, sanctioned.

GOVERNMENT OF MADRAS.

PUBLIC WORKS DEPARTMENT.

Irrigation.
Account.

No. 27.

Read—the following paper:—

No. 114 I.

Note by the Acting Chief Engineer for Irrigation, dated 9th November 1882.

Government of India Circular No. XXXIII, Public Works, of 1880.

Abstract statement showing the First Revised Estimate of Expenditure on Productive Public Works, Capital Account for 1882-83 and Rough Budget Estimate for 1883-84.

	Actuals to end of 1880-81.			Actuals for 1881-82.			Budget Estimate, 1882-83.			First revised Estimate 1882-83.			Rough Budget Estimate, 1883-84.		
	Ordinary.	Productive Public Works.	Total.	Ordinary.	Productive Public Works.	Total.	Ordinary.	Productive Public Works.	Total.	Ordinary.	Productive Public Works.	Total.	Ordinary.	Productive Public Works.	Total.
37. Productive Public Works, Capital Account.	RS.	RS.	RS.	RS.	RS.	RS.	RS.	RS.	RS.	RS.	RS.	RS.	RS.	RS.	RS.
In India.															
Godávari Delta System ..	..	89,20,776	89,20,776	..	99,164	99,164	..	2,03,000	2,03,000	..	2,07,047	2,07,047	..	4,09,249	4,09,249
Kistna	..	55,59,084	55,59,084	..	1,14,736	1,14,736	..	3,27,748	3,27,748	..	3,19,175	3,19,175	..	6,12,114	6,12,114
Cauvery	..	10,17,174	10,17,174	..	..	..	..	..	..	..	6,225	6,225	..	2,49,000	2,49,000
Pennér	..	14,28,862	14,28,862	..	..	..	..	..	..	..	..	..	..	..	..
Srívaikuntham	..	12,23,392	12,23,392	..	1,058	1,058	..	38,250	38,250	..	37,945	37,945	..	37,837	37,837
Sangum	..	51,130	51,130	..	1,80,177	1,80,177	..	4,78,750	4,78,750	..	4,73,882	4,73,882	..	6,27,500	6,27,500
Reserve	..	..	..	..	..	..	..	..	..	..	1,907	..	..	..	..
	..	1,82,00,418	1,82,00,418	..	3,95,135	..	.	10,47,748	10,47,748	..	10,46,181	10,46,181	..	19,35,700	19,35,700
Less Refund from Provincial grant	..	..	..	..	..	..	..	47,748	..	..	..	..	..	..	..
								10,00,000							
In England.															
Godávari	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Kistna	..	..	..	..	..	..	..	..	..	..	..	..	..	14,300	14,300
Sangum	..	..	..	..	..	..	..	..	..	..	1,567	1,567	..	..	..
											1,567			14,300	14,300
Interest on above outlay.															
Godávari	..	..	..	..	3,58,814	3,58,814	..	3,65,236	3,65,236	..	3,64,938	3,64,938	..	3,77,264	3,77,264
Kistna	..	..	..	..	2,24,658	2,24,658	..	2,19,231	2,19,231	..	2,33,336	2,33,336	..	2,51,962	2,51,962
Cauvery	..	..	..	..	40,687	40,687	..	40,687	40,687	..	40,811	40,811	..	45,915	45,915
Pennér	..	..	..	..	57,154	57,154	..	57,154	57,154	..	57,154	57,154	..	57,154	57,154
Sangum	..	..	..	..	5,649	5,649	..	..	..	..	18,731	18,731	..	40,755	40,755
Srívaikuntham	..	..	..	..	48,957	48,957	..	49,741	49,741	..	49,734	49,734	..	51,248	51,248
Total ..	..	..	..	..	7,35,919	7,35,919	..	7,32,049	7,32,049	..	7,64,704	7,64,704	..	8,24,298	8,24,298

ABSTRACT Statement showing the First Revised Estimate of Revenue and Expenditure on Irrigation and Navigation Works for 1882-83 and Rough Budget Estimate for 1883-84.

—	Actuals, 1881-82.				Budget Estimate, 1882-83.				First Revised Estimate, 1882-83.				Rough Budget Estimate for 1882-83.			
	Imperial.	Provincial.	Local Incorporated.	Total.	Imperial.	Provincial.	Local Incorporated.	Total.	Imperial.	Provincial.	Local Incorporated.	Total.	Imperial.	Provincial.	Local Incorporated.	Total.
	RS.	RS.	RS.	RS.	RS.	RS.	RS.	RS.	RS.	RS.	RS.	RS.	RS.	RS.	RS.	RS.
XXVI Revenue from all Works	1,82,392	1,26,496	..	3,08,888	1,28,791	1,17,000	..	2,45,791	* 2,11,791	1,17,000	..	3,28,791	* 2,41,080	1,12,000	..	3,53,080
I. Land Revenue from Productive Public Works ..	37,74,705	..	..	37,74,705	58,30,000	..	..	58,30,000	58,30,000	..	..	58,30,000	58,68,000	..	..	58,68,000
Revenue from Productive Public Works included in XXVI above	1,51,767	..	..	1,51,767	1,08,185	..	..	1,08,185	1,08,185	..	..	1,08,185	1,26,660	..	..	1,26,660
33. Expenditure on all works excluding Capital Outlay on Productive Public Works ..	23,52,574	2,51,644	..	26,04,218	34,32,135	2,99,112	..	37,31,247	†33,21,954	‡ 3,52,754	..	36,74,708	†34,83,500	3,34,450	..	38,17,950
Working expenses and maintenance of Productive Public Works included in 33 above	7,29,767	..	..	7,29,767	10,97,111	..	..	10,97,111	9,89,293	..	..	9,89,293	9,97,600	..	..	9,97,600
31. Expenditure, Famine Protective Works	59,832	..	..	59,832	..	..	..	..	63,000	..	..	63,000	§ 1,84,500	..	..	1,84,500

* Including Rs. 83,000, the estimated revenue from the Kurnool Canal.
† ,, ,, 1,15,661, the estimated expenditure on the do.
‡ ,, ,, 53,642 for the Madras Water-supply and Irrigation Extension Project.
§ Rushikulya Project .. .. Rs. 1,24,500
Investigation of Projects .. .. ,, 60,000
,, 1,84,500

N.B.—The estimates of Land Revenue due to Productive Public Works include Rs. 21,00,000 on account of revenue derived from old irrigation which is not taken into account in the "Actuals."

Submitted to Government.

2. The above statements have been compiled in accordance with the Government of India Circular No. XXXIII, dated 5th October 1880. The figures representing "Actuals" have been taken from the finance and administrative accounts received from the Examiner of Public Works Accounts.

3. The amounts entered as "First revised estimate for 1882-83" are the grants as they now stand including the allotments sanctioned for the Kurnool Canal. Under G.O., No. 1940 W., dated 1st August 1882, the actual cost of establishment employed in the project divisions is chargeable to "Protective Public Works." As there is no grant in the current year's budget under this head, an application for Rs. 63,000 will be submitted as soon as the information called for regarding the distribution of the estimate by projects is received from Superintending Engineers. This amount has been included in the first revised estimate.

4. The assignment of funds by the Government of India not having been received the Budget Estimates for 1883-84 have not been prepared, and the amounts shown in the schedule of demands printed with Proceedings of Madras Government, No. 812 I., dated 13th October 1882, have been entered.

No. 28.

Order—dated 10th November 1882, No. 914 I., Public Works.

Ordered that the copy of these Proceedings be forwarded to the Government of India in manuscript.

(Here enter No. 915 I., dated 10th November 1882.)

(True Extract.)

(Signed) J. O. HASTED, Colonel, R.E.,
Ag. Joint Secy. to Govt., P.W.D.,
Irrigation Branch.

To the Chief Engineer for Irrigation.
" Examiner, Public Works Accounts.

No. 29.

Endorsement—dated 10th November 1882, No. 915 I., Public Works.

Forwarded.

(Signed) J. O. HASTED, Colonel, R.E.,
Ag. Joint Secy. to Govt., P.W.D.,
Irrigation Branch.

IRRIGATION.
ACCOUNT.

Govt. of (1882) Madras.

PUBLIC WORKS.

Dated November, 10th.

Recd. *Encl.*

G.O., 10th Nov. 1882, No. 915 I.

NOVEMBER.

Nos. 27–29.

First revised Estimate for 1882-83.

FORWARDING abstract statements showing the — of revenue and expenditure on Irrigation and Navigation works and the rough Budget Estimate for 1883-84.

GOVERNMENT OF MADRAS.

PUBLIC WORKS DEPARTMENT.

Irrigation.

No. 30.

READ—the following paper :—

No. 566 T.N.

Tinnevelly Executive Engineer's original letter No. 442 T.N. of 17th October 1882.
One Estimate.

In G.O., No. 418 I., dated 30th May 1882, the Superintending Engineer was directed to report on a claim, made by the Local Fund Board of Tinnevelly, against Government for 75 per cent. of the cost incurred by them in repairing certain damage to roads Nos. VII and VII-D, which they assert were due to breaches in irrigation works; the total amount claimed is three-fourths of Rs. 1,140 + Rs. 1,060 + Rs. 3,400, or Rs. 4,200. The President allows that the percentage is a matter of opinion, and he and two members consider that 50 per cent., or Rs. 2,800 would be a more reasonable claim.

2. The Executive Engineer's report in original, No. 442, dated 17th October 1882, is forwarded, and the Superintending Engineer agrees with him that the Local Fund Board have no claim whatever for any percentage.

3. The Local Fund Boards were given over certain roads, and it is notorious that during extraordinary rains accidents to irrigation works occur, and as a rule these accidents do considerable damage to Local Fund works and to the property of private individuals, but the undersigned is not aware of Government having ever considered itself responsible for such damage or loss of property, although they have as a matter of favor on some occasions given grants in aid and assistance.

4. Should Government allow this or any similar claim it will render itself liable to enormous compensation claims in exceptional years all over the country. The Superintending Engineer, therefore, considers that this application should be refused, and he sees no reason why in this case any compensation should be paid as a matter of favor.

5. Another point has to be considered, namely, the impossibility of judging rightly how much of the damage done was due to the failure of certain tanks, and the Executive Engineer shows, it is thought, conclusively that much of the damage said to have been so caused was from want of waterway, &c., in the roads, and he asserts that the breaches in the tanks added but little to the damages caused by the rain and flood; he estimates (see the estimate accompanying his report) the damage at only Rs. 270.

Probably this estimate is below what it should be, but there is no doubt but that, allowing for a moment that Government are responsible for the damage to the roads caused by the bursting of the tanks, the claim made; Rs. 4,200, is much more than should have been made. It is thought that Rs. 750 would more than cover the cost of the additional damage caused by the breaching of the tanks to the roads.

TRICHINOPOLY,
30th October 1882.

(Signed) H. R. MEAD, Lieut.-Col., R.E.,
Supg. Engineer, Sixth Circle.

ENCLOSURE.

From J. W. MARTIN, Esq., Executive Engineer, Tinnevelly Division, to the Superintending Engineer, Sixth Circle, dated Palamcottah, 17th October 1882, No. 442.

1 Estimate, Rs. 270.
1 Copy of the Estimate, Rs. 1,140, with report.
1 Copy of Estimate, Rs. 1,060.
1 ,, ,, ,, 3,400, with specification.

With reference to your No. 231 T.N., dated 24th June 1882, I have the honor to state that I think the President's report regarding the damages caused to roads Nos. VII and VII-D is an exaggerated one, for it seems to me that it is almost certain the water from the breached tanks did not run along the roads in the manner described in paragraph 2 of his letter.

2. Regarding the part of road No. VII which lies within the limits of Tenkási Taluk, the President's estimate for repairing it amounts to Rs. 1,140. It is, however, evident from the report accompanying the estimate that the greater part of the cost, if not the whole, should be borne by the Local Fund Board, for it is explained that "extensive damages have also occurred in the third mile west of Tenkási where the road from its improper formation formed a watercourse, and the flood water carried away the metal as well as a great quantity of the earth;" and further on, it is stated that although the road was damaged by the breach in Kandamangalum tank it was not considered necessary to provide extra waterway, "as at the time the damage occurred the whole country was flooded and on both sides of the road the water stood from 3 to 4 feet above the level of the road surface." Regarding breach No. 1, the report explains that this was caused by the waterway of the bridge over the Sittar river not being sufficient; and as to breach No. 2, it is explained that although this was caused by the bursting of Novakulam, a zemindari tank, it was found necessary to provide additional waterway, as the present culverts are inadequate to carry off the drainage even in ordinary floods. Under these circumstances I think the Board should bear the whole cost of repairing this part of the road.

3. With reference to the part of the road within the limits of Tinnévelly Taluk. From the estimate amounting to Rs. 3,400 for repairing the damages furnished by the President, it appears the road was breached in four places in the tenth mile. This is the part of the road under Pudur Ponanjikulam, which lies immediately below Marandai Periakulam. Both these tanks were breached, and the water from them crossed at the tenth mile and did not afterwards get near the road. No water flowed over the surface of the road from the tenth to the ninth mile, for there is a slight rise between these two miles. The other breaches occurred in the ninth and eighth miles. There was one breach in each mile. It seems reasonable to suppose that all the water from the breached tanks crossed through these breaches without doing further damage.

4. The President's estimate for repairing the damages amounts to Rs. 3,400, but it seems to me it includes a lot of repair work that could not have been rendered necessary owing to the breaching of the tanks. In the first place it provides for a new masonry road dam, and for repairs and improvements to other masonry works. The estimate for all these amounts to Rs. 562. In the second place his estimate for closing the six breaches already referred to, and for repairing the road adjoining the breaches, amounts to only Rs. 270, as per the accompanying estimate, which is an extract from the President's estimate. I am strongly inclined to believe that this sum Rs. 270 represents all the damage that was caused to road No. VII by the water from the breached tanks. As to the water from the tanks having rushed over the surface of the road I am very doubtful whether this did happen.

5. The President has not furnished any evidence to show that (1) the waterway of the bridges is adequate to pass across the road the ordinary drainage of the country, (2) that the side drains were in proper order, and (3) that the surface of the road was in such a state as to be able to bear, without damage, exceptionally heavy rain. In the absence of information on these points, and with the knowledge that, as a general rule, the waterway of Local Fund road bridges is not adequate and well arranged to suit requirements during exceptionally heavy rain, and that it is the rule, and not the exception, for the side drains and surfaces of roads to be in a more or less neglected state, I think it is reasonable to suppose that, beyond the breaches, the damage was the result of the bad state of the road and the exceptionally heavy rain.

6. In regard to road No. VII-D. From the estimate amounting to Rs. 1,060 furnished by the President, it appears this road was not breached, but that merely the surface was injured. It is therefore difficult to decide how much of the damage was caused by the bursting of the tanks. It is, however, necessary to remark that supposing the tanks had not breached at all, it is more than probable the road would have been severely damaged, for it is within the influence of Kariselkulam Odai. The bursting of the tanks no doubt added to the waters of the Odai, but as this Odai drains 40 square miles, and as the catchment basin adjoins some of the country drained by the Sittar river over which the maximum rainfall of the storm seems to have fallen (for the flood in the Sittar river was nearly as high as any previous flood), it is almost certain that, whether the tanks were breached or not, the road would have been severely damaged. So long as the Odai is left in its present state, this road will always be damaged during exceptionally heavy rain. Several schemes for improving the Odai have been investigated, all of which have proved

unsatisfactory, and the last and final order on the subject is contained in G.O., No. 531 I., dated 10th July 1882.

7. From an equity point of view, it is, I think, open to argument whether the Local Fund Board should be paid at all for the damages caused by the breaching of the tanks. The tanks are very old works, and it is certain they were in existence long before the roads were made. So the roads were made with a full knowledge that the tanks were there, and that during heavy rain it was customary for them to get breached; in fact, this may be described as the normal habit of the tanks; to prevent them from breaching would be to introduce an abnormal state of affairs. Under these circumstances the Local Fund Board should, I think, accept the consequences of having taken over roads that are liable to get damaged when the banks of the overlying tanks breach.

No. 31.

ORDER—dated 11th November 1882, No. 916 I., Public Works.

The Right Honorable the Governor in Council is of opinion that the Local Fund Board, Tinnevelly Circle, have no just claim upon Government for any portion of the cost incurred in repairing damages to roads Nos. VII and VII-D in the Tinnevelly Circle, and that nothing in the circumstances of the case warrants compensation being given as a matter of favor.

(True Extract.)

(Signed) J. O. HASTED, Colonel, R.E.,
Ag. Joint Secy. to Govt., P.W.D.,
Irrigation Branch.

To the Superintending Engineer, Sixth Circle.
„ Chief Engineer for Irrigation (with two Enclosures).
„ Examiner, Public Works Accounts.
„ Financial Department.

IRRIGATION.

Govt. of {1882} Madras.

PUBLIC WORKS.

Dated November, 11th.

Recd. *Encl.*

G.O., 11th Nov. 1882, No. 916 I.

NOVEMBER.

Nos. 30-31.

Roads Nos. VII and VII-D in the Tinnevelly Local Fund Circle.

Ruling that the Local Fund Board have n[o] claim on Government for the cost of repairin[g] damages caused to the — by breaches [of] irrigation works.

GOVERNMENT OF MADRAS.

PUBLIC WORKS DEPARTMENT.

Irrigation.
Account.

No. 32.

READ—the following paper :—

No. 113.

Note by the Chief Engineer for Irrigation.

The Forms for statistical statements, communicated with G.O., No. 229 I., of 11th March 1882, may be adopted for works, in this Presidency, for which Capital and Revenue Accounts are kept, subject to the following alterations and additions proposed in communication with Superintending Engineers, the Examiner of Public Works Accounts, and the Board of Revenue.

2. *Form No.* 1 *A.*—The Superintending Engineer, Second Circle, has expressed a doubt as to whether the rainfall within the area commanded by the works, or that of the catchment basin of the river whence the supply is drawn, should be entered in this form. It will be sufficient to record the former, as the "minimum discharge" of the river required to be shown in the statement takes into account the quantity of rainfall of the catchment basin of the river itself. The expenditure should be shown in the same detail as in the sanctioned estimates.

The mileage of canals sanctioned and completed should be shown as follows :—

	Number of Miles.
Main Canals and Branches for Irrigation	
Do. do. for Irrigation and Navigation	
Do. do. for Navigation	
Distributaries	

3. *Form II A.*—Areas of catchment basin should be in square miles. There are no wells supplied by tanks in this Presidency.

4. *Form No.* I *B.*—The word "canals" should be substituted for "sections" in columns 2 and 4 of this form, as some canals in a section may be under construction while others are in operation.

5. *Form I C.*—The Direct Irrigation Revenue may be divided into—

1. Saving of remissions on usual wet lands,
2. Water rates,

and Indirect Revenue into—

1. Assessment on waste lands brought under irrigation,
2. Increments of assessment,
3. Miscellaneous revenue.

Under Revenue derived from sources other than irrigation the following heads may be added :—

Water-supply of towns.
Old maintenance charges saved.

Establishment charges are calculated at a percentage rate on revenue and outlay and cannot therefore be shown separately under—

Direction,
Execution,
Navigation,
Medical,

but they may be exhibited in the following details—

23 per cent. on outlay,
10 per cent. on revenue collected in the Public Works Department,
6 do. do. do. in the Revenue Department.

Expenditure on Plantations may be included under Maintenance and Repairs, but that on Extensions and Improvements should be shown separately. Charges for General and Special Tools and Plant should also be exhibited in separate columns. A revised form showing the alterations proposed is submitted for approval.

6. *Form No. II C.*—The collection of Irrigation Revenue in this Presidency is not recorded separately from Land Revenue. The demand is therefore entered in all accounts of Irrigation Works as revenue realized. The revenue realized in the Public Works Department is assessed and collected simultaneously. Under these circumstances the Form No. II C may be omitted. Demand and collection do not vary so far as regards the system of Public Works Accounts.

7. *Form No. III C.*—This Form may also be omitted for reasons given above.

8. *Forms Nos. IV C and V C.*—These Forms may be accepted.

9. *Form No VI C.*—This Form is apparently intended to show the summary of the financial results of the several works for ten years. It may be so far modified as to show separately the totals for Productive Public Works, Ordinary Irrigation Works, and Protective Works. As the estimated cost of construction cannot be shown separately for each year, the total amount sanctioned up to date may be entered against all the years bracketed. The column "Date of completion" cannot be filled in, as several separate works will be included under each head.

10. *Form No. VII C.*—Sections of each system should be entered in this form. Sections being the natural divisions of works in the system, *e.g.*, the Eastern, Central, and Western Deltas of the Godávari, the north and south main channels of the Srívaikuntham Anicut System. For the terms "Khariff" and "Rubbee," used in this and all other forms, the entries "sown from April to November," and "sown from December to March" should be substituted—*vide* G.O., No. 2934, dated 5th December 1873. As the establishment and tools and plant charges are not distributed by each section, but debited to the system as a whole, the total working expenses for each main canal cannot be determined. Expenditure on maintenance and repairs may be shown instead of working expenses.

11. *Form No. VIII C.*—In this form only such important distributaries as branch off immediately from the canals classed under (2) Main Canals and Branches need be entered. Each individual distributary entered in this statement should include all channels which it supplies. As stated above, expenditure on Maintenance and Repairs and not on working expenses should be compared with the area irrigated.

12. *Form No. I D.*—Traffic in this Presidency is carried on by private enterprise except on the Kurnool canal, on which it is conducted by Government agency as a temporary measure. The ton mileage entered in the traffic returns, furnished to this office, is calculated from the aggregate capacity of boats, and the number of passengers shown is the number for which the boats are licensed; the value of goods is obtained from the statements of the boatmen, and must necessarily be an approximation. The weight of cargo cannot be ascertained. Any attempt to ascertain actual weight and more correct description of the cargo means interference with the boatmen, and possibly detention and oppression, and it is therefore considered advisable that approximations should suffice. The totals for each system need only be entered in this statement.

13. *Form No. II D.*—In this form also only approximate figures can be given. The following headings appear suitable for canals in this Presidency :—

1. Food grains.
2. Salt.
3. Cotton.
4. Oil-seeds, nuts and oil.
5. Hemp.
6. Building materials.
7. Fuel.
8. Timber.
9. Bamboos, &c.
10. Miscellaneous.

The traffic statements hitherto received for the Godávari and Kistna canals do not show the quantity and value of each description of goods. Superintending Engineers concerned should make the necessary arrangements to record the information in the traffic registers in future.

14. *Form No. I E.*—The columns showing the areas irrigated may be arranged as follows :—

—		Area Irrigated.			
		Sown from April to November.	Sown from December to March.	Both Seasons.	Total.
Godávari.					
Eastern Delta	Flow				
	Lift				
Central Delta, &c.	Flow				
	Lift				
	Total ...				

The quantity of water utilised for irrigation may be calculated from the area irrigated, when no other means of calculating the supply are available.

15. *Form II E.*—The information required to fill in this form is not at present available, and arrangements will have to be made in the Revenue Department to collect the information.

The description of crops may be arranged as follows :—

Cereals—
Rice ... ...
Maize ... ...
Chenna ... ...
Miscellaneous ... ...

Total ...

Fibre—
Cotton ... ...
Miscellaneous ... ...

Total ...

Dyes—
Indigo .. ..
Miscellaneous ... ...

Total ...

Drugs—
Tobacco ... ...
Miscellaneous ... ...

Total ...

Oil Seeds—	
Mustard	
Linseed	
Miscellaneous	
Total ...	
Miscellaneous	
Grand Total ...	

No practical difficulty would be experienced in entering the quantity of produce in lbs., cwts., and tons, instead of maunds.

16. *Form No. III E.*—This form can be filled in by Executive Engineers. It should show the dates of closing and opening each main canal.

17. *Form No. IV E.*—Statements in this form could be prepared for the following tanks:—

Chembrambaukam tank.
Cholavaram tank.
Red Hills tank.

Forms I F and 2 F may be accepted, the former being the rainfall by sections of each system, it being necessary only to see that the fall is gauged at a sufficient number of places in each section. The Superintending Engineers, First and Second Circles, have sent in sketch maps of the Godávari and Kistna Deltas, and Pennér Anicut System, showing the stations at which rainfall is registered at present, and from these it would appear that no further arrangements for recording rainfall are necessary for the above systems. The Superintending Engineers, Third, Fourth, Fifth, and Sixth Circles should report the stations in which rainfall is at present registered, and at what other stations it is desirable to establish rain-gauges within the areas commanded by the following works:—

Kurnool canal.
Chembrambakam tank.
Madras Water-supply and Irrigation Extension Project.
Pálár Anicut System.
Pelandorai Anicut System.
Cauvery Delta Anicut System.
Srívaikuntham do.

For the Buckingham Canal a register of rainfall need not be kept as it is a salt water canal. The amount of sanctioned estimates, the expenditure incurred, the navigation receipts and traffic are all that should be entered in the statement for this canal.

Chepauk,
31st October 1882.

(Signed) J. O. HASTED, Colonel, R.E.,
Ag. Chief Engineer for Irrigation.

To the Joint Secretary to Government,
Public Works Department, Irrigation Branch.

REVISED FORM No. I.C.

Statement showing the Financial results of Irrigation Works in for Main heads of Revenue and Working Expenses for the year ended 31st March 18 .

Irrigation Works.	REVENUE.													WORKING EXPENSES.												
	IRRIGATION.						OTHER SOURCES.							REVENUE MANAGEMENT.				MAINTENANCE OF WORKS.								
	Direct.		Indirect.											Public Works Department.							Tools and plant.					
	Water-rates.	Saving of Remission on usual wet lands.	Assessment on Waste lands brought under Irrigation.	Increment of Assessment.	Miscellaneous Revenue.	Total.	Navigation.	Plantation and Lands.	Water-power.	Water-supply of Towns.	Miscellaneous.	Old Maintenance Charges saved.	Total.	Ten per cent. on Revenue collected in the Public Works Department.	Six per cent. on Revenue collected in the Revenue Department.	Collection Charges in the Revenue Department at 7-2 per cent.	Total.	Extension and Improvements.	Maintenance and Repair including Plantations.	Establishment at 23 per cent. on outlay.	General.	Special.	Total.	Indirect Charges.	Total.	Net Revenue.
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27
Productive Public Works ..																										
Total ..																										
Ordinary Irrigation Works ..																										
Total ..																										
Productive Public Works ..																										
Total ..																										

No. 33.

ORDER—dated 11th November 1882, No. 918 I., Public Works.

The alterations and additions proposed by the Acting Chief Engineer for Irrigation to be made in the forms for statistical statements required by the Government of India are approved.

2. The statements are intended to be submitted with every annual Revenue Report on irrigation works. Hitherto it has been impossible to prepare such a report in accordance with the forms adopted in other Provinces, but considering the progress that has been made in the preparation of Irrigation Revenue Accounts, the Government trust that this will ere long be practicable.

3. The Board of Revenue will be requested in the Revenue Department to state what arrangements will be necessary to furnish the Public Works Department with information regarding the areas irrigated, the revenue derived, and the out-turn of produce under the several systems of Irrigation.

4. The Superintending Engineers, First, Second, Third, and Fifth Circles will see that immediate arrangements are made for recording the additional information required regarding traffic, &c., referred to in paragraph 13 of the Note by the Chief Engineer for Irrigation.

5. The Superintending Engineers, Third, Fourth, Fifth, and Sixth Circles will report the stations in which rainfall is at present registered, and at what other stations it may be desirable to establish rain-gauges within the areas commanded by the several irrigation systems for which Capital and Revenue Accounts are kept.

6. Ordered that a copy of these Proceedings be forwarded to the Government of India in reply to their Secretary's letter, No. 36 I., dated 3rd February 1882.

(Here enter No. 919 I., dated 11th November 1882.)

(True Extract.)

(Signed) J. O. HASTED, Colonel, R.E.,
Ag. Joint Secy. to Govt., P.W.D.,
Irrigation Branch.

To Superintending Engineers.
To the Chief Engineer for Irrigation.
„ Examiner, Public Works Accounts.
„ Revenue Department.
„ Board of Revenue.
To W. Wilson, Esq., with G.O., No. 229 I. of 11th March 1882.

No. 34.

ENDORSEMENT—dated 11th November 1882, No. 919 R., Public Works.

Forwarded.

(Signed) J. O. HASTED, Colonel, R.E.,
Ag. Joint Secy to Govt., P.W.D.,
Irrigation Branch.

IRRIGATION.
ACCOUNT.

Govt. of {1882} Madras.

PUBLIC WORKS.

Dated November, 11th.

Recd. *Encl.*

G.O., 11th Nov. 1882, No. 919 I.

NOVEMBER.

Nos. 32—34.

Statistical Statements.

FORWARDING copy of Proceedings approving of alterations, &c., being made in the forms of — required by the Government of India.

GOVERNMENT OF MADRAS.

PUBLIC WORKS DEPARTMENT.

Irrigation.

No. 35.

READ—the following papers :—

G.O., dated 20th September 1882, No. 3082, Revenue.

From Major J. PENNYCUICK, R.E., Superintending Engineer, Third Circle, to the Chief Engineer for Irrigation, dated Bellary, 1st November 1882, No. 1386.

One Proceedings of Court of Wards with Estimate, &c.
„ Plan.

In returning the papers received with your No. 22 M.D. of 25th instant, I have the honor to state that the addition to the supply of the lower Vaigai caused by the Periyár water will be far greater than any amount that can be taken off for the proposed works in the Gandamanáyakanúr Zemindari, but that as the Periyár project provides for the utilization below the Peranny of all the water thus brought down in addition to the existing supply of the Vaigai any appropriation of the former to compensate for a demand upon the latter would diminish the amount of the former supply available for the expressed objects of the project, and would in fact amount to indirectly supplying the Zemindari with water at the expense of the Periyár works.

2. If, therefore, the Zemindari would not have the right to appropriate the water in question under present circumstances, the appropriation should certainly not be allowed merely because of the execution or proposed execution of the Periyár project.

3. The direct irrigation of the land in question with Periyár water would of course be impossible, as the latter comes down the Sooroolly and does not join the Vaigai till ten miles below the site of the proposed anicut.

4. Although outside the questions specially referred for my opinion, I may add that, from my knowledge of the Vaigai, I am convinced that the estimated discharge of 10,166 cubic feet per second for two months will be found to be greatly exaggerated.

No. 35-A.

G. O. dated 18th October 1882, Mis. No. 3431, Revenue.

Read—the following Proceedings of the Court of Wards, dated 11th October 1882, No. 2477 :—

Read—the following letter from H. H. SHEPHARD, Esq., Government Pleader, Madras, to the Sub-Secretary to the Court of Wards, dated 2nd October 1882, No. 78.

1st September 1882, No. 2180.

With reference to the Proceedings of the Court of Wards noted in the margin I have the honor to submit the following opinion :—

I understand that "the proprietors lower down the stream," referred to in the first question submitted to me, are riparian owners, as is the Gandamanáyakanúr Zemindar, with respect to the river Vaigai. This being so, they are

as such entitled to a flow of water not unreasonably diminished by the use of other riparian proprietor higher up the stream. The question how far the use of water by a riparian owner may extend without being wrongful is one of degree depending on the quantity of water available, the quantity used, the area irrigated, and all the other circumstances of the case. It is impossible to state in more precise terms what the rights of such persons are, but from what is said in the papers with regard to the proposed works I should be disposed to think that their rights would be infringed.

2. If the Gandamanáyakanúr Zemindar is, as I have supposed, a riparian proprietor, his right, not being in the nature of an easement, is not, I think, affected by the provisions referred to, and non-use of the water on his part would not, in my opinion, by itself deprive him of his right to use the water when he thought fit.

3. The circumstance referred to in the third question can, I think, have no effect on the question.

Resolution—dated 11th October 1882, No. 2477.

Submitted to Government in continuation of Board's Proceedings, dated 1st September 1882, No. 2180.

(True Copy and Extract.)

(Signed) E. GIBSON,
Acting Secretary.

Order—dated 18th October 1882, Mis. No. 3431, Revenue.

Transferred to the Public Works Department, Irrigation Branch, in continuation of this Department endorsement dated 20th September 1882, No. 3082.

(Signed) E. F. WEBSTER,
Secretary to Government.

No. 115 I.

No. 35-B. *Note by the Acting Chief Engineer for Irrigation.*

With reference to the points on which the Court of Wards in paragraph 4 of their Resolution No. 2180, dated 1st September 1882, request the opinion of the Chief Engineer, the undersigned would remark that the proposed works are feasible and would probably, with some modification, be sufficient. The section of the anicut might certainly be improved, and it would be necessary to found part of it on wells, as 18 feet of solid foundations would be difficult to build. These are however matters of detail which hardly seem to need consideration at present. The objection to the scheme is the want of information as to the water-supply, the statement that the water usually flows for about two months and the depth shown in the plan needs confirmation.

2. To the second and third points mentioned by the Court, a letter from Major Pennycuick, R.E., the officer who is now engaged in revising the Periyár replies, it would appear that the project provides for the utilization of all the water available, and there is no possibility of the lands referred to being irrigated by the project.

3. The opinion of the Government Pleader seems to be that the rights of the cultivators lower down the river would be infringed by the construction of the anicut. Though the fact of the anicut having been in ruins for twenty-two years should not be a bar to the Zemindar making use of the water.

4. Under these circumstances the Court of Wards will probably not sanction the work. Under any circumstances, it is considered that though it might be unobjectionable to allow the Zemindar to store any of the surplus flood-water he could catch,

when the river is not in flood he cannot have any claim to water for the irrigation of land in excess of the extent which the old anicut commanded.

CHEPAUK,
6th November 1882.

(Signed) J. O. HASTED, Col., R.E.,
Acting Chief Engineer for Irrigation.

To the Joint Secretary to Government,
Public Works Department, Irrigation Branch.

No. 36.

ORDER—dated 13th November 1882, No. 920 I., Public Works.

Communicated to the Court of Wards through the Revenue Department.

(True Extract.)

(Signed) J. O. HASTED, Colonel, R.E.,
Ag. Joint Secy. to Govt., P.W.D.,
Irrigation Branch.

To the Revenue Department, with twenty-seven enclosures.
" Superintending Engineer, Third Circle.
" Chief Engineer for Irrigation.
" Superintending Engineer, Sixth Circle.

IRRIGATION.

Govt. of {1882} Madras.

PUBLIC WORKS.

Dated November, 13th.

Recd. *Encl.*

G.O., 13th Nov. 1882, No. 920 I.

NOVEMBER,

Nos. 35-36.

Vaigai River.

Regarding the legal rights of the Zemindar of Gandamanáyakanúr to improve the irrigation of his lands by means of the works connected with the —.

GOVERNMENT OF MADRAS.

PUBLIC WORKS DEPARTMENT.

Irrigation.
Account.

No. 37.

READ—the following papers :—

Read—the following Proceedings of the Board of Revenue, dated 9th November 1882, Mis. No. 8617.

Read—again Board's Proceedings, dated 18th September 1882, No. 2312.

Read—also Comparative Statement of Irrigation and Rainfall for the years 1880-81 and 1881-82 in the Kistna District from the Collector, dated 17th October 1882, No. 2624.

Resolution—dated 9th November 1882, Mis. No. 8617.

With reference to the foot-note appended to the statement forwarded with Board's Proceedings, dated 18th September 1882, No. 2312, the Collector of Kistna now reports that Acres 53,130 of Zemindari lands have been irrigated in that district in 1881-82 under the Kistna Anicut. The Chief Engineer for Irrigation is, therefore, requested to add this area to Acres 3,801 entered against Zemindari land in column 5 of the statement above referred to, and to cause the necessary alterations to be made in the other columns of the statement.

(True Extract.)

(Signed) E. GIBSON,
Acting Secretary.

No. 38.

ORDER—dated 15th November 1882, No. 923 I., Public Works.

Ordered to be forwarded for the information of the Government of India in continuation of Proceedings of Madras Government, No. 826 I., dated 17th October 1882.

(Here enter No. 924 I., dated 15th November 1882.)

(True Extract.)

(Signed) J. O. HASTED, Colonel, R.E.,
Ag. Joint Secy. to Govt., P.W.D.,
Irrigation Branch.

To Superintending Engineers.
,, the Chief Engineer for Irrigation.
,, the Revenue Department.
,, the Board of Revenue.

No. 39.

ENDORSEMENT—dated 15th November 1882, No. 924 I., Public Works.

Forwarded.

(Signed) J. O. HASTED, Colonel, R.E.,
Ag. Joint Secy. to Govt., P.W.D.,
Irrigation Branch.

IRRIGATION.
ACCOUNT.

Govt. of {1882} Madras.

PUBLIC WORKS.

Dated November, 15th.

Recd. *Encl.*

G.O., 15th Nov. 1882, No. 924 I.

NOVEMBER.
Nos. 37—39.

Irrigation and Rainfall.

FORWARDING for information Proceedings of the Board of Revenue altering the statement of — for 1881-82 for the Kistna District.

GOVERNMENT OF MADRAS.

PUBLIC WORKS DEPARTMENT.

Irrigation.
Account.

No. 40.

READ—the following letter from Major G. F. L. MARSHALL, R.E., Under Secretary to the Government of India, Public Works Department (Civil Works—Irrigation), to the Secretary to the Government of Madras, Public Works Department, dated Simla, 1st November 1882, No. 413 I. :—

In reply to your letter, No. 749 I., of the 21st September 1882, I am directed to communicate the approval of the Government of India to the proposed redistribution of the total amount sanctioned for the Sangam Anicut Project, viz. :—

	RS.
Works	23,94,142
Establishment	4,89,560
Tools and Plant	1,42,354
	30,26,056
Deduct—	
Sale proceeds of tank beds	1,29,619
	28,96,437

2. The plans and estimates forwarded with your letter are herewith returned.

No. 41.

ORDER—dated 15th November 1882, No. 927 I., Public Works.

Communicated to the officers concerned.

(True Extract.)

(Signed) J. O. HASTED, Colonel, R.E.,
Ag. Joint Secy. to Govt., P.W.D.,
Irrigation Branch.

To the Superintending Engineer, Second Circle.
" Chief Engineer for Irrigation, with 102 enclosures.
" Examiner, Public Works Accounts.
" Revenue Department.
" Board of Revenue.

IRRIGATION ACCOUNT.

Govt. of {1882} Madras.

PUBLIC WORKS.

Dated November, 15th.

Recd. *Encl.*

G.O., 15th Nov. 1882, No. 927 I.

NOVEMBER.

Nos. 40-41.

Sangam Project.

The redistribution of the total amounts sanctioned for the —, approved by Government of India.

GOVERNMENT OF MADRAS.

PUBLIC WORKS DEPARTMENT.

Irrigation.
Account.

No. 42.

Read—the following paper :—

No. 118 I.

Note by the Chief Engineer for Irrigation.

At the request of the Examiner of Public Works Accounts the abstract estimate for restoring the Pennugoondapuram tank, sanctioned in G.O., No. 375 I., dated 6th May 1882, has been recast in Form No. 77 F, prescribed by the Public Works Code, as it is required to enable him to compare the estimate and expenditure under each sub-head without reference to the component works of the project. The cost of each component work will, however, have to be recorded in the Executive Engineers' accounts.

2. The amount of Rs. 1,224 provided for "unforeseen works" in the previous estimate has now been omitted, as supplemental estimates can, under paragraph 1000 of the Public Works Code, be sanctioned whenever additional works are found necessary.

3. The revised estimate is submitted for the sanction of Government.

Chepauk,
11th November 1882.

(Signed) A. S. RUSSELL,
for Chief Engineer for Irrigation.

To the Joint Secretary to Government, Public Works Department, Irrigation Branch.

No. 43.

Order—dated 21st November 1882, No. 930 I., Public Works.

The revised estimate, amounting to Rs. 71,416, for restoring the Pennugoondapuram tank, is sanctioned.

2. The sanction, which supersedes that given in G.O., No. 375 I., dated 6th May 1882, has been registered as No. 45 I. of 1882-83.

(True Extract.)

(Signed) J. O. HASTED, Colonel, R.E.,
Ag. Joint Secy. to Govt., P.W.D.,
Irrigation Branch.

To the Superintending Engineer, Fourth Circle.
" Chief Engineer for Irrigation.
" Examiner, Public Works Accounts, with Abstract Estimate.
" Revenue Department.
" Board of Revenue.

IRRIGATION.
ACCOUNT.

Govt. of {1882} Madras.

PUBLIC WORKS.

Dated November, 21st.

Recd. *Encl.*

G.O., 21st Nov. 1882, No. 930 I.

NOVEMBER.
Nos. 42-43.

Pennugoondapuram Tank.

The revised estimate for restoring the —, sanctioned.

GOVERNMENT OF MADRAS.

PUBLIC WORKS DEPARTMENT.

Irrigation.

No. 44.

Read—the following papers :—

G.O., dated 6th November 1882, No. 1204, Revenue.

Read—the following Proceedings of the Board of Revenue, dated 3rd October 1882, No. 2417 :—

Read—the following letter from A. CRUICKSHANK, Esq., Collector of South Arcot, to the Secretary to the Board of Revenue, dated Cuddalore, 21st September 1882, No. 381 :—

With reference to the Order of Government, dated the 11th ultimo, No. 842, communicated in the Board's Proceedings of the 14th idem, No. 6199, Miscellaneous, I have the honor to state that I have visited all the villages in the Chidambaram taluk affected by the floods in the Coleroon.

2. On the 11th July last, the left bank of the river was breached at Kuruvadi Velur, a hamlet of C. Arasur, Mulangudi and Udayárpálaiyam. As the floods continued it was impossible to get earth and the breaches could not be closed. On the 24th July the floods rose a little higher than they were on the 11th, and it was then that the damage to house property occurred. There was little or no damage to houses near the places where the bank was breached, but the water found its way to the low-lying localities, and the mud-walls of the houses built in such places got completely soaked and fell down entirely or partially. Only in one instance did I see any signs that a house had been brought down by a current, and this was in the case of the Police station-house at Terlenmangudi. Water got into 101 villages, but in thirteen of them there was no loss of any kind, and in other thirty-five no houses were damaged. Houses and huts to the number of 711 were reported to have been damaged, but it has to be observed that this number includes every house that was damaged in the slightest degree. When I visited the villages many had repaired their houses or were repairing them. Very few houses belonging to caste people were touched; by far the greater number of the houses damaged belonged to Pariahs. This is easily explained by the former having chosen good sites, while the latter had to be content with what they could get. After personal inquiry in every case I gave small sums to 237 persons to help them to rebuild or repair their houses or huts. I gave no assistance to those Pariahs who were the agricultural servants of well-to-do Puttabdars. In many instances the latter had put their servants' houses right, and those who had not done so promised to do so at once. I distributed Rs. 415 out of the Rs. 500 sanctioned by Government.

3. Owing to the water having stood so long the paddy seedlings were drowned, and the quantity of seed which the ryots say they lost in this way is 16,313 kallams. It can be safely asserted that no more than this was lost, but it is impossible to say how much less may have been lost as we have no means of testing the truth of their statements. The Curnams keep no account of the extent of land used for seed beds. Two hundred and thirty-six kallams of ragi and cumbu seeds are also said to have been lost as well as the seed sown broadcast on 41 acres of wet land dependent entirely on the rainfall. In this case also there are no accounts by which the truth or otherwise of such loss can be ascertained, as, though the Curnams ought to have entered the extent cultivated in their accounts, they allege as an excuse for its non-entry that the seeds were sown only a few days before the land was flooded. A very small extent of sugar-

cane was destroyed, and the indigo crop on a hundred acres is also said to have been washed away. Seed-beds have been again sown in nearly all the villages and the Tahsildar is of opinion that it is unnecessary to give any assistance to those who have lost their young plants, and I agree with him. The ryots in Chidambaram taluk are generally fairly well off, and if assistance were given the determining who should get assistance and how much he should get would of necessity, under the circumstances, be very arbitrary, and would be about the most unsatistactory work one could well undertake. The fact that seeds have been again put down in most villages is, I think, proof positive that no aid is required. In a few villages it has been impossible to put down seeds again at once as in some places the channels have been completely silted up. Steps have been taken to have them cleared out, but if 3,000 or 4,000 rupees could be placed at the disposal of the Revenue Department, it would be well, as, I think, we could with the assistance of the villagers concerned get them put in working order sooner than the Department of Public Works is likely to do. There are lands held on putta within the river bank, and these as well as some outside it near the places where the larger breaches occurred have been rendered unfit for cultivation for the present owing to their being covered with sand and silt to some depth. The extent of such land is about 257 acres.

4. Two channels branch off from the river at the lower anicut to supply water to the lands of this district. They are named the Rajah Vaikkal and the Vadavar. The Rajah Vaikkal has shutters at its head, while the Vadavar has none. The Vadavar breached its right bank about half-a-mile from its head, and as the two channels are not very far apart in the first part of their course, the water from the Vadavar breached the left bank of the Rajah Vaikkal. For fourteen miles from the anicut the right bank of the Rajah Vaikkal forms the left bank of the Coleroon and is used as a road. There were no breaches in this road, but opposite the village of Keeru Puliamputt (it is not marked on the sketch herewith sent, but it is between the 6th and the 7th milestones) the river threatened on a former occasion to cut away the road when groynes were put up. These groynes, seven in number, have all been damaged, and it will be necessary to have a larger one than those damaged erected about 100 yards above them to turn the river off from the bank towards the centre of the bed, as, though these groynes proved of service, there is now a deeper stream than before running alongside of them. An opening will also have to be cut in the silted up portion of the bed near the place were the stream turns off to the side, with a view to make the water cut its way through the silted portion, and perhaps another groyne will have to be put near this to prevent the water from going and joining the stream by the side of the bank lower down. This work ought to be attended to before next year's freshes; and I understand the Department of Public Works intends to do something at this part of the river for the protection of the bank. From the 14th mile the right bank of the Rajah Vaikkal and the left bank of the Coleroon become separate. Another dangerous place is near the villages of C. Arasur and M. Arasur about the 16th mile on the left bank of the Coleroon. The nanal planted here has been considerably cut up, and attention will have to be given to the part of the bank near these villages as there is evidently a set against it. The left bank of the Coleroon is in a very bad state in many places; in some places there is scarcely a bank at all. All the bank ought to be put in proper order and raised.

5. The right bank of the Vadavar will require to be raised in the 8th, 9th, 10th and 11th miles, as during the floods earth had to be thrown up along the banks in these miles to prevent the water from getting over the bank. The raising of the bank has, I believe, been sanctioned. There is no proper bank on the left side of the channel, and I am given to understand that the raising of the bank on this side is objected to on the ground that there are no shutters at the head of the Vadavar. The drainage on the left side of the Vadavar runs towards the Vadavar, and the ryots complain of the water coming across their fields and propose that it should be collected into a channel along the side of the Udayárpálaiyam road and conveyed into the Veeranum tank.

6. Some of the villages in the Mannárgudi Division of the taluk were flooded owing to a ring bund having been put across the surplus channel of the Veeranum

tank, which is fed by the Vadavar near a bridge over it, to admit of the bridge being repaired. This bund was not cut till the 24th or 25th July. Other villages in the same division had their lands flooded by water from the Khan Sahib's canal. Near Veeranattam the canal divides into two branches; one is the canal proper with a lock, and the other has a masonry dam for the purpose of keeping back water to go down the branch with the lock. Both this lock and the dam kept back the water, made it overflow the banks, and cut a way for itself round the masonry work and the lock. The water flooded the lands round about and breached the road in two places. Both are not at all required now, and they as well as the lock at Lálápet should be removed and the water allowed to flow freely.

7. On the island in the Coleroon below the bridge on the road from Chidambaram to Tanjore there are portions of three villages, viz., Jeyamkondaupatnam, Kátur, and Nadulapadugei. It is said that there were two feet of water over the island. The house of the Monegar of the village of Nadulapadugei is raised and no water got into it. Many of the islanders took refuge there. The island at the south-east corner is several feet above the bed of the river, but there is now a set against this corner and four houses there were partially damaged before and have now been entirely destroyed. From the very position of the island those on it must always be in danger in floods, but the islanders say that if nanal is planted round the island for about three miles from the north-west side to the south-east corner they will be in no danger. They say the current was formerly towards the south side, and now for some time it has changed towards the island. I spoke to them of leaving the island, but I did so with a view to see what they would say, for I did not suppose they would consent to do so. They of course, as was to be expected, asked what they would do if they were to leave their houses and lands. Something ought, I think, to be done to divert the current of the river from the island to the direction in which it ran some years ago. A great number of houses appears from the statement herewith sent to have been damaged. This is owing to the Curnam having entered every house on the island as damaged, but I gave assistance to such house-owners only as appeared on inquiry to require it.

8. In the first quarter of the 3rd mile of the road from Chidambaram to Nattarajapuram, a surplus channel branches off from the Khan Saib's canal, and the ryots of Nattarajapuram, Tiruvasaladi, Kanakarputt, Kumaramungalam and other neighbouring villages complained that their lands were inundated by this channel overflowing its banks, and requested that the banks might be raised. The banks have been breached in several places, and I think the banks of this channel should be repaired, as from what the ryots said it is evident they have received no attention since a very long time.

9. In the course of my inspection of the various channels and their banks, the ryots brought several other things to notice, but I shall address the Executive Engineer regarding them as they are not of such importance as to trouble Government about, and it is quite possible that though what the ryots said appeared reasonable enough, there are obstacles in the way of giving effect to their wishes, and that what they wished to have altered could not be so without detriment to others.

10. Several roads were breached, but most of the breaches have been filled up and the roads made passable for traffic. The estimated cost of repairing the roads is Rs. 5,196, and it will be a question some day whether Government should not defray the cost of repairing breaches caused under such circumstances as the present.

11. I submit herewith a statement showing the damage reported to have occurred and the expenditure from the 500 rupees sanctioned by Government as well as a plan showing the country covered by water from the breaches.

12. In conclusion, I regret very much that I should have incurred the displeasure of Government as up to this occasion I have never been accused of shirking my duty; and I most respectfully submit that hearsay reports have been received before without exception being taken, that the divisional officer was on the spot, and that I do not know what I could have done at the time I reported when there was water everywhere and it was impossible to move about.

Enclosure No. 1.—Statement.

Enclosure No. 2.—Sketch.

Resolution—dated 3rd October 1882, No. 2417.

Submitted to Government with reference to G.O., 11th August 1882, No. 842.

2. The amount of damage occasioned by the floods was less serious than might have been expected. Out of 711 houses reported to have been more or less injured the Collector found it necessary to give assistance to the owners of only 237, stating that landlords have rendered help in many cases and that in many the injury was slight. The principal damage was done to seed-beds and the loss of seed-grain was considerable; but the Collector does not think that relief in this direction is called for.

3. Mr. Cruickshank says that a sum of Rs. 3,000 or 4,000 could be advantageously and promptly laid out under his orders in clearing channels which have been silted up, but the Board would prefer to leave the execution of repairs to the officers of the Public Works Department, who will doubtless exert themselves to carry out the needful work with the requisite expedition.

4. The several points noticed at paragraphs 4 to 8 of the Collector's letter appear to demand the attention of professional officers, and the Board recommend that the matter be brought to the notice of the Public Works Department.

5. With reference to the remarks at paragraph 10, it is observed that the information afforded does not show that any claim can properly be made against Government for damage to Local Fund Roads caused by this unusual flood.

6. The Board are unable to accept as satisfactory the Collector's explanation for not promptly repairing to the scene of distress.

(A true Copy and Extract.)

(Signed) E. GIBSON,
Acting Secretary.

Order—dated 6th November 1882, No. 1204, Revenue.

The funds placed at the disposal of the Collector for the relief of the sufferers by the recent inundations appear to have been distributed with discretion, and the report now submitted by Mr. Cruickshank is full and satisfactory.

2. The Government agree with the opinion of the Board of Revenue, which finds expression at paragraph 5 of their Proceedings.

3. Paragraphs 3—9 inclusive, of the Collector's letter, will receive consideration in the Public Works Department.

(True Extract.)

(Signed) E. F. WEBSTER,
Secretary to Government.

No. 45.

Order—dated 21st November 1882, No. 931 I., Public Works.

Referred to the Superintending Engineer, Fifth Circle, for report with reference to the several points raised in paragraphs 3—9 of the Collector's letter.

2. With reference to paragraph 3 of the Board's Proceedings, the Superintending Engineer will take early steps to have the necessary repairs to the channel carried out, and will submit an application for the allotment required, if the funds at his disposal are insufficient.

(True Extract.)

(Signed) J. O. HASTED, Colonel, R.E.,
Ag. Joint Secy. to Govt., P.W.D.,
Irrigation Branch.

To the Superintending Engineer, Fifth Circle.
" Chief Engineer for Irrigation.
" Examiner, Public Works Accounts.
" Revenue Department.
" Board of Revenue.

IRRIGATION.

Govt. of (1882) Madras.

PUBLIC WORKS.

Dated November, 21st.

Recd. *Encl.*

G.O., 21st Nov. 1882, No. 931 I.

NOVEMBER.

Nos. 44-45.

Floods in the Coleroon.

The report on the — by the Collector of South Arcot referred to the Superintending Engineer, Fifth Circle, for report, and the necessary repairs to the channel ordered to be carried out.

GOVERNMENT OF MADRAS.

PUBLIC WORKS DEPARTMENT.

Irrigation.
Account.

No. 46.

READ—the following letter from G. T. WALCH, Esq., Officiating Superintending Engineer, First Circle, to the Chief Engineer for Irrigation, dated Dowlaishweram, 25th October 1882, No. 1699 G.D. :—

I have the honor to request permission to increase the existing fleet of staff * boats by one first-class boat with office rooms like No. 14, Rs. 1,400, and one second-class boat like No. 17, Rs. 850.

2. There are now four † first-class and four ‡ second-class boats which are evidently not enough to supply the demand of the seven § officers and the six or seven European and Eurasian Upper Subordinates employed in the Deltas.

* Hitherto "Range," which is no longer an applicable name.

† Nos. 1, 11, 14, 16.

‡ Nos. 12, 13, 15, 17.

§ One Superintending Engineer.
Three Executive Engineers.
" Assistant "

3. It will be seen from Proceedings of Madras Government, No. 677 I., dated 29th August 1882, that the staff boat account is in a satisfactory state, and I am convinced that the new boats now proposed will return a fair percentage to Government.

4. Should the proposal now made be approved, I would request an extra allotment for the current year of Rs. 1,500,|| under Tools and Plant, Productive Public Works, Revenue Account, Irrigation, New Supplies, "Staff" boats.

|| Making in all Rs. 1,900.

No. 47.

ORDER—dated 22nd November 1882, No. 933 I., Public Works.

The Superintending Engineer, First Circle, is authorized to increase the existing fleet of staff boats by one first-class boat with office room, and one second-class boat similar to boats Nos. 14 and 17, respectively. He will submit an estimate for sanction and report whether the amount required can be met by transfer from the grant for repairs to floating plant for the current year.

2. The term "Range boats" is now inapplicable and will be replaced by "Staff boats" in all future returns and correspondence.

(True Extract.)

(Signed) J. O. HASTED, Colonel, R.E.,
Ag. Joint Secy. to Govt., P.W.D.,
Irrigation Branch.

To the Superintending Engineer, First Circle.
To other Superintending Engineers.
To the Chief Engineer, for Irrigation.
" the Examiner, Public Works Accounts.

IRRIGATION.
ACCOUNT.

Govt. of (1882) Madras.

PUBLIC WORKS.

Dated November, 22nd.

Recd. *Encl.*

G.O., 22nd Nov. 1882, No. 933 I.

NOVEMBER.

Nos. 46-47.

Staff Boats, Godavari Delta.

Increase to the existing fleet of—authorized.

GOVERNMENT OF MADRAS.

PUBLIC WORKS DEPARTMENT.

Irrigation.

No. 48.

READ—the following paper:—

No. 119 I.

Notes of Inspection by the Acting Chief Engineer for Irrigation.

The Red Hills Tank was inspected in company with the Superintending Engineer on the 7th November 1882.

2. The shutters to all the surplus sluices have been fixed and nothing remains to be done but to point the face wall about the cross beams. The shutters worked well without pressure against them, but the angle irons on which they will rest when water is in the tank are rusty and consequently rough, and there will be considerable friction where there is a head of water. If time allows, the faces should be filed smooth. The ring bund in front was being removed. Some labor might be saved by removing it to floor level only in front of two or three of the middle vents, and washing the rest of the bund through the sluice when water rises. The soil is not hard and would be easily removed in this way, if the piles are first taken out. The soil removed from the bund by manual labor might be carried through the sluices vents and deposited in the scour hole below the apron. The masonry work of sluices and apron is completed, and the cement seems to have set very hard.

3. The superstructure of these sluices is very clumsy, and much higher than is necessary. The shutter platform might safely be at 3 feet above the level of the crest of the weir, and, with the existing lever handles to the screw gearing, the upper surface of the gearing beams might be level with the bridge floor. The demolition would cost only a trifle, and the cutting of the screws to the requisite depth would not be expensive. The rear parapet of the bridge, which is of brick (the rest of the work being of stone), should be replaced with a stout iron railing. The planking of the bridge should be tarred. The Superintending Engineer has been requested to attend to this matter before next working season, that is, before the water in the tanks falls so low that the work can be undertaken.

4. The weir is being raised to full supply level, and only a small portion remains to be completed, which it is expected will be done in about a week; the work is solid and good, and when completed will look well. In his Note of Inspection of November 1881, Colonel Mullins says that "the small apron which formerly existed in rear at the base of the weir wall between the north weir and the surplus sluices has been almost entirely displaced, and the buttresses of this wall are almost undermined. The apron should be replaced in laterite masonry, and it will be desirable to protect it with a coating of three inches of good concrete made of hard gravel and hydraulic mortar for the laterite is too friable to stand the overfall." This has not been attended to at present. The subject was mentioned to the Superintending Engineer, and it was arranged that the stone which has been removed from the ring bund and has been stacked in rear of the sluices should be utilised for the purpose at once. No delay should take place, as when water rises in the tank the concrete in rear of the weir will not set properly.

5. The ground in rear of the north weir has been cut down to crest level, so that the whole weir will now be effective.

6. The tank bund is in fair order throughout, trees on the rear slope have been cleared away, and the casuarinas planted at foot of rear slope seem generally to be growing well. The revetment in front of old slips in the bund has been made up and the drains appear to be working well. Packing the interstices of the stone revetment with chips, as directed by Colonel Mullins, has not yet been attended to.

CHEPAUK, (Signed) J. O. HASTED, Colonel, R.E.,
8th November 1882. Ag. Chief Engineer for Irrigation.

To the Acting Joint Secretary to Government, Public Works Department, Irrigation Branch.

No. 49.

ORDER—dated 22nd November 1882, No. 934 I., Public Works.

Communicated to the Superintending Engineer, Fifth Circle, for information and guidance.

(True Extract.)

(Signed) J. O. HASTED, Colonel, R.E.,
Ag. Joint Secy. to Govt., P.W.D.,
Irrigation Branch.

To the Superintending Engineer, Fifth Circle.
„ Chief Engineer for Irrigation.

IRRIGATION.

Govt. of {1882} Madras.

PUBLIC WORKS.

Dated November, 22nd.

Recd. *Encl.*

G.O., 22nd Nov. 1882, No. 934 I.

NOVEMBER.

Nos. 48-49.

Red Hills Tank.

Inspection Notes on the — by the Acting Chief Engineer for Irrigation.

GOVERNMENT OF MADRAS.

PUBLIC WORKS DEPARTMENT.

Irrigation.
Account.

No. 50.

READ—the following letter from J. W. RUNDALL, Esq., Superintending Engineer, Second Circle, to the Chief Engineer for Irrigation, dated Camp, Duggirala, 13th November 1882, No. 1516 K.S. :—

Referring to your No. 84 K.S. of the 22nd September, approving of the plan and revised estimate for the Kollur Lock, I have the honor to report that if funds be given at once the materials required to enable the foundations to be put in next April can be sent down.

2. I therefore request that sanction may be given for the transfers shown below to enable the work to be commenced.

3. The money proposed to be transferred from the Eastern Division is available in consequence of revised estimates for the several works being under preparation, and not yet ready for submission.

Budget Item. No.	*From* Eastern Section. (2) Main Canals and Branches.	RS.	*To* Western Section. (2) Main Canals and Branches. Bank Canal.	RS.
	Ellore Canal.			
20 F.	(1) Other cross drainage works.	2,000		
	Polaraz Canal.			
21 L.	Earthwork	1,000		
	(I. Navigation) Head Lock ...	2,000		
		5,000	Constructing a lock at Kollur ...	5,000

No. 51.

ORDER—dated 22nd November 1882, No. 935 I., Public Works.

The proposed transfer of funds is sanctioned.

2. Ordered that this sanction be communicated to the Superintending Engineer, Second Circle, by telegram.

(True Extract.)

(Signed) J. O. HASTED, Colonel, R.E.,
Ag. Joint Secy. to Govt., P.W.D.,
Irrigation Branch.

To the Superintending Engineer, Second Circle.
,, Chief Engineer for Irrigation.
,, Examiner, Public Works Accounts.

IRRIGATION.
ACCOUNT.

Govt. of {1882} Madras:
PUBLIC WORKS.

Dated November, 22nd.

Recd. *Encl.*

G.O., 22nd Nov. 1882, No. 935 I.

NOVEMBER.

Nos. 50-51.

Kellur Lock.

Sanctioning certain transfers of funds to enable the work connected with the — being proceeded with.

GOVERNMENT OF MADRAS.

PUBLIC WORKS DEPARTMENT.

Irrigation.

No. 52.

READ—the following papers :—

CUDDAPAH DISTRICT.

HALF-YEARLY Statement showing the Full Demand, Remissions and Net Demand on account of water supplied for Irrigation by the Madras Irrigation and Canal Company for the half-year ending 30th June 1882.

—		Extent of Irrigation.	Rate per Acre.	Full Demand.	Remissions. Failure of Crop by Excess or Deficiency of Water.	Remissions. Other Causes.	Remissions. Total.	Net Demand.
1		2	3	4	5	6	7	8
		ACRES.		RS. A. P.	RS.	RS.	RS.	RS. A. P.
Sugar, betel, cocoanuts, saffron, plantains, and other fruit trees.	Flow ..	..	12	..	..	..	..	..
	Lift ..	..	8	..	..	..	..	..
Rice field sown	Flow ..	..	6	..	..	..	..	..
	Lift ..	..	4	..	..	..	..	..
Rice on bedded and bunded fields. 1st year ..	Flow ..	..	3	..	..	..	..	..
	Lift ..	..	2	..	..	..	..	..
2nd ,, ..	Flow ..	..	4	..	..	..	..	..
	Lift ..	..	$2\frac{2}{3}$	..	..	..	..	..
3rd ,, ..	Flow ..	..	5	..	..	..	..	..
	Lift ..	..	$3\frac{1}{8}$	..	..	..	..	..
Subsequent years.	Flow ..	..	6	..	..	..	..	..
	Lift ..	..	4	..	..	..	..	..
Garden raggy, onions, chillies, sweet potatoes, tobacco, maize, garden korra, indigo and brinjals.	Flow ..	..	4	..	..	..	..	..
	Lift ..	..	$2\frac{2}{3}$	..	..	..	..	..
Cholum, field-raggy, field-korra, field-tobacco, field-chillies, cotton, grain, and oil seeds.	Flow ..	..	2	..	..	..	..	..
	Lift ..	..	$1\frac{1}{8}$	..	..	..	..	..
Series of crops	Flow ..	..	6	..	..	..	..	..
	Lift ..	..	4	..	..	..	..	..
First-class crop irrigated partly by the canal.	Flow ..	37 78	$1\frac{1}{2}$ (Per month.)	88 2 8	..	..	..	a 88 2 8
	Lift ..	2 56	1 (Per month.)	5 1 11	..	..	..	b 5 1 11
Second-class crop irrigated partly by the canal.	Flow ..	..	1 (Per month.)	..	..	..	..	..
	Lift ..	..	$\frac{2}{3}$ (Per month.)	..	..	..	..	..
Irrigation after 1st January ..	Flow ..	4,130 39	1 (Per month.)	5,337 9 7	..	..	..	c 5,337 9 7
	Lift ..	45 64	$\frac{2}{3}$ (Per month.)	40 4 7	..	..	..	d 40 4 7
Total ..	Flow ..	4,168 17	..	5,425 12 3	..	..	..	5,425 12 3
	Lift ..	48 20	..	45 6 6	..	..	..	45 6 6
Water supplied to store		4,216 37	..	5,471 2 9	..	..	..	5,471 2 9
Penalties		..	..	..	..	..	..	2 0 0
		..	..	..	..	..	..	5,473 2 9

ACRES.	DEMAND.	MONTHS.	ACRES.	DEMAND.	MONTHS.	ACRES.	DEMAND.	MONTHS.
a 25 56	38 5 3	1	c 3,028 11	3,028 4 9	1	d 30 84	20 8 11	1
3 44	10 5 2	2	997 69	1,995 8 9	2	14 80	19 11 8	2
8 78	39 8 3	3	104 59	313 12 1	3	45 64	40 4 7	
37 78	88 2 8		4,130 39	5,337 9 7				
b 2 56	5 1 11	2						

CUDDAPAH,
5th October 1882.

(Signed) W. C. HOLMES,
Ag. Head Assistant Collector.

(True Copy.)

(Signed) H. SOOBBA ROW,
Deputy Collector,
for Collector.

14th October 1882.

No. 143 I.C.C. and No. 144 I.C.C.

Copy forwarded to the Examiner of Railway and Irrigation Accounts, and Superintending Engineer, Third Circle.

(Signed) J. O. HASTED, Colonel, R.E.,
Ag. Chief Engineer for Irrigation.

KURNOOL DISTRICT.

HALF-YEARLY Statement showing the full Demand, Remissions and Net Demand on account of water supplied for Irrigation by the Madras Irrigation and Canal Company for the half-year ending 30th June 1882.

—		Extent of Irrigation.	Rate per Acre.	Full Demand.	Remissions. Failure of Crop by Excess or Deficiency of Water.	Remissions. Other Causes.	Remissions. Total.	Net Demand.
1		2	3	4	5	6	7	8
		ACRE.		RS. A. P.	RS. A. P.	RS. A. P.	RS. A. P.	RS. A. P.
Sugar, betel, cocoanuts, saffron, plantains, and other fruit trees.	Flow ..	2 58	6	15 7 8	..	..	..	15 7 8
	Lift ..	..	8	..	..	..	..	..
Rice field sown	Flow ..	3 66	6	21 15 4	..	..	..	21 15 4
	Lift ..	..	4	..	..	..	..	..
Rice on bedded and bunded fields. 1st year ..	Flow ..	..	3	..	..	..	..	..
	Lift ..	..	2	..	..	..	..	..
2nd ,, ..	Flow ..	4 74	4	18 15 4	..	..	..	18 15 4
	Lift ..	0 90	2⅔	2 6 5	..	..	..	2 6 5
3rd ,, ..	Flow ..	..	5	..	..	..	..	..
	Lift ..	..	3⅓	..	..	..	..	..
Subsequent years.	Flow ..	..	6	..	..	..	..	..
	Lift ..	..	4	..	..	..	..	..
Garden raggy, onions, chillies, sweet potatoes, tobacco, maize, garden korra, indigo, and brinjals.	Flow ..	2 27	4	9 1 3	..	..	..	9 1 3
	Lift ..	..	2⅔	..	..	..	..	..
Cholum, field-raggy, field-korra, field-tobacco, field-chillies, cotton, grain and oil seeds.	Flow ..	..	2	..	..	..	..	..
	Lift ..	..	1⅓	..	..	..	..	..
Series of crops	Flow ..	..	6	..	..	..	..	..
	Lift ..	..	4	..	..	..	..	..
1st-class crop irrigated partly by the canal.	Flow ..	*25 8	1½	114 11 10	..	..	..	114 11 10
	Lift ..	†5 74	1	21 15 2	..	..	..	21 15 2
2nd do. do. do. ..	Flow ..	..	1	..	..	..	..	..
	Lift ..	..	⅔ Per month.	..	..	..	..	..
Irrigation after 1st January ..	Flow ..	a 1,747 89	1	2,060 9 7	..	..	..	2,060 9 7
	Lift ..	b 8 51	⅔	9 7 0	..	..	..	9 7 0
Total ..	Flow ..	1,786 22	..	2,240 13 0	..	..	..	2,240 13 0
	Lift ..	15 15	..	33 12 7	..	..	..	33 12 7
Water supplied to store		c 997 67	..	984 10 8	..	..	..	984 10 8
Grand Total ..		2,799 4	..	3,259 4 3	..	..	..	3,259 4 3

ACRES.	MONTHS.	RS. A. P.	ACRES.	MONTHS.	RS. A. P.
a 2 4	1	3 1 0	c 1,455 98	1	1,457 0 2
8 69	2	26 1 3	270 14	2	538 4 5
0 33	3	1 7 9	21 77	3	65 5 0
14 2	4	84 1 10	1,747 89		2,060 9 7
25 8		114 11 10	d 1 16	1	0 14 2
b 0 46	2	0 14 9	7 35	2	8 8 10
0 10	3	0 4 10	8 51		9 7 0
5 18	4	20 11 7	e 26 13 at 8 As.		13 0 11
5 74		21 15 2	971 54 at 1 Re.		971 9 9
			997 67		984 10 8

KURNOOL,
24th October 1882.

(Signed) W. H. GLENNY,
Collector.

No. 141 I.C.C. and No. 142 I.C.C.

Copy forwarded to the Examiner, Railway and Irrigation Accounts, and Superintending Engineer, Third Circle.

(Signed) J. O. HASTED, Colonel, R.E.,
Ag. Chief Engineer for Irrigation.

31st October 1882.

No. 120 I.

Submitted for the information of Government in continuation of G.O., No. 635 I. of 12th August 1882.

2. The total area of irrigation during the half-year was as follows:—

1878-79.	1879-80.	District.	1880-81. Half-year ended 31st December 1880.	1880-81. Half-year ended 30th June 1881.	1880-81. Total.	1881-82. Half-year ended 31st December 1881.	1881-82. Half-year ended 30th June 1882.	1881-82. Total.	Difference between Columns 5 and 8.	Remarks.
1	2	3	4	5	6	7	8	9	10	11
ACRES.	ACRES.		ACRES.	ACRES.	ACRES.	ACRES.	ACRES.	ACRES.	ACRES.	ACRES.
8,352	8,889	Kurnool ..	4,640	2,079	6,719	9,123	2,799	11,922	720	Increase.
10,010	10,116	Cuddapah ..	7,411	3,871	11,282	8,547	4,216	12,763	345	Do.
18,362	19,005		12,051	5,950	18,001	17,670	7,015	24,685	1,065	Increase.

3. The increase in Kurnool was 34·63 per cent. and in Cuddapah 8·91 per cent., or together about 17·90 per cent. more than the area irrigated during the half-year ended 30th June 1881.

The revenue derived from irrigation was as shown below:—

1878-79.	1879-80.	District.	1880-81. Half-year ended 31st December 1880.	1880-81. Half-year ended 30th June 1881.	1880-81. Total.	1881-82. Half-year ended 31st December 1881.	1881-82. Half-year ended 30th June 1882.	1881-82. Total.	Difference between Columns 5 and 8.	Remarks.
1	2	3	4	5	6	7	8	9	10	11
RS.	RS.		RS.	RS.	RS.	RS.	RS.	RS.	RS.	RS.
42,056	37,657	Kurnool ..	19,069	4,197	23,266	32,966	3,259	36,225	938	Decrease.
39,270	37,549	Cuddapah ..	31,112	5,097	36,210	35,737	5,473	41,210	376	Increase.
81,326	75,206		50,181	9,294	59,476	68,703	8,732	77,435	562	Decrease.

This shows a decrease of 22·35 per cent. in Kurnool and an increase of 7·38 per cent. in Cuddapah, or together 6·47 per cent. less than the revenue derived during the half-year ended 31st June 1881.

3. The following statement shows the area irrigated and revenue collected, by taluks, for the half-year ended 30th June 1882 :—

Taluks.	Area Irrigated.	Full Demand.	Penalty.	Total Demand.	Remissions.			Net Demand.
					Failure of crop by Excess or Deficiency of Water.	Other Causes.	Total.	
		RS. A. P.	RS. A. P	RS. A. P.	RS. A. P.	RS. A. P.	RS. A. P.	RS. A. P.
KURNOOL DISTRICT.								
Nandyál	1475 30	1,528 1 0	..	1,528 1 0	..	..	..	1,528 1 0
Sirvel	345 90	420 13 8	..	420 13 8	..	..	..	420 13 8
Koilkuntla	144 44	209 2 4	..	209 2 4	..	..	..	209 2 4
Rámallakót	130 ..	347 15 9	..	347 15 9	..	..	..	347 15 9
Nandikótkur	703 40	753 3 6	..	753 3 6	..	..	..	753 3 6
Total, Kurnool District ..	2,799 4	3,259 4 3	..	3,259 4 3	..	..	..	3,259 4 3
Cuddapah	1,749 72	1,924 4 5	2 0 0	1,926 4 5	..	..	..	1,926 4 5
Proddatur	2,387 78	3,444 2 6	..	3,444 2 6	..	..	..	3,444 2 6
Jammalamadugu ..	78 87	102 11 10	..	102 11 10	..	..	..	102 11 10
Total, Cuddapah District.	4,216 37	5,471 2 9	2 0 0	5,473 2 9	..	..	..	5,473 2 9
Grand Total ..	7,015 41	8,730 7 0	2 0 0	8,732 7 0	..	..	..	8,732 7 0

4. The average water-rates were as follow :—

District.	Half-year ended		1880-81.	1881-82.
	30th June 1881.	30th June 1882.		
Kurnool	2·02	1·16	3·46	3·04
Cuddapah	1·32	1·30	3·21	3·23

CHEPAUK,
13th November 1882.

(Signed) A. S. RUSSELL,
for Chief Engineer for Irrigation.

To the Joint Secretary to Government, Public Works Department, Irrigation Branch.

No. 53.

ORDER—dated 23rd November 1882, No. 936 I., Public Works.

Communicated to the Revenue Department in continuation of G.O., No. 635 I., of 12th August 1882.

2. A copy of these Proceedings will be forwarded for the information of the Government of India.

(Here enter No. 937 I., dated 23rd November 1882.)

(True Extract.)

(Signed) J. O. HASTED, Colonel, R.E.,
Ag. Joint Secy. to Govt., P.W.D.,
Irrigation Branch.

To the Revenue Department.
„ Chief Engineer for Irrigation.
„ Superintending Engineer, Third Circle.
„ Examiner, Public Works Accounts.

No. 54.

ENDORSEMENT—dated 23rd November 1882, No. 937 I., Public Works.

Forwarded.

(Signed) J. O. HASTED, Colonel, R.E.,
Ag. Joint Secy. to Govt., P.W.D.,
Irrigation Branch.

IRRIGATION.

Govt. of {1882} Madras.

PUBLIC WORKS.

Dated November, 23rd.

Recd. *Encl.*

G.O., 23rd Nov. 1882, No. 937 I.

NOVEMBER.

Nos. 52—54.

Madras Irrigation and Canal Company.

STATEMENT showing the full demand, &c., on account of water supplied for irrigation by the — for the first-half of 1882.

GOVERNMENT OF MADRAS.

PUBLIC WORKS DEPARTMENT.

Irrigation.
Account.

No. 55.

Read—the following docket from D. C. Gordon, Esq., Examiner, Public Works Accounts, to the Joint Secretary to Government, Public Works Department, Irrigation Branch, dated Madras, 19th October 1882, No. 10 I. :—

Copy of the following forwarded to the Joint Secretary to Government, Public Works Department, Irrigation Branch, for information and printing.

Enclosure.

Copy of letter from the Examiner, Public Works Accounts, to the Accountant-General, Public Works Department, No. $\frac{132}{A}$, dated 19th October 1882.

In continuation of this office letter No. 70 A., of 9th July last, I have the honor to submit herewith the administrative accounts of the Irrigation and Navigation Works of this Presidency and to explain that these accounts, though submitted late this year, contain as accurate results as possible, since the transactions under Revenue have all been based on the figures furnished by Mr. Wilson, C.S., and not on approximates and estimates which were adopted in previous years.

No. 56.

Order—dated 24th November 1882, No. 938 I., Public Works.

The administrative accounts of Irrigation Works for 1881-82, prepared by the Examiner of Public Works Accounts, show the following results after paying all charges including interest :—

	Percentage of Surplus Revenue on Capital Outlay.	Percentage of Deficit on Capital Outlay.
Productive Public Works.		
Godávari Delta	9·18	...
Kistna do.	7·98	...
Cauvery do.	57·52	...
Pennér Anicut	2·1	...
Srívaikuntham do.	...	2·1
Ordinary Irrigation Works.		
Chembrambaukam Tank	1·47	...
Pálár Anicut	0·12	...
Pelandorai	...	21·77

2. The high percentage shown against the Cauvery Delta is due to the natural advantages it possesses in having branches of rivers doing the duty of canals.

3. Irrigation under the Srívaikuntham Anicut System has not yet fully developed, owing to the works being still incomplete.

4. The restoration of the Pelandorai Anicut, which was breached during the floods of November 1880, having been in progress during the year, no water was let down the main canal for irrigation.

5. In the administrative accounts of the previous year an approximate estimate of revenue had to be entered for want of accurate figures, but this year Mr. Wilson has furnished the Revenue Accounts much earlier than usual, and it has therefore been possible to exhibit in the administrative accounts the actual revenue earned during the revenue year ended 30th June 1882. The accounts do not, however, include the "Settlement Increase" due to the systems noted in the margin, nor the revenue derived from lands irrigated entirely by the Nellore tank. This portion of the revenue will be included as soon as it is ascertained by Mr. Wilson.

Pennér Anicut.
Pálár do.
Pelandorai do.
Srívaikuntham do.
Chembrambaukam Tank.

6. The administrative accounts are approved, and will be printed and forwarded to the Government of India for information.

(Here enter No. 939 I., dated 24th November 1882.)

(True Extract)

(Signed) J. O. HASTED, Colonel, R.E.,
Ag. Joint Secy. to Govt., P.W.D.,
Irrigation Branch.

To Superintending Engineers.
,, the Chief Engineer for Irrigation.
,, the Examiner, Public Works Accounts.
,, the Revenue Department.
,, the Board of Revenue.
,, W. Wilson, Esq.

No. 57.

ENDORSEMENT—dated 24th November 1882, No. 939 I., Public Works.

Forwarded.

(Signed) J. O. HASTED, Colonel, R.E.,
Ag. Joint Secy. to Govt., P.W.D.,
Irrigation Branch.

IRRIGATOIN. ACCOUNT.

Govt. of (1882) Madras.
PUBLIC WORKS.

Dated November, 24th.

Recd. *Encl.*

G.O., 24th Nov. 1882, No. 939 I.

NOVEMBER.
Nos. 55—57.

Administrative Accounts of Irrigation and Navigation Works.

Orders on the — for the year 1881-82.

ADMINISTRATIVE ACCOUNTS,

MADRAS PRESIDENCY,

IRRIGATION,

FOR THE YEAR

1881-82.

TABLE OF CONTENTS.

Systems, &c.	No. 1, General Abstract of Financial Results.	No. 2, Capital Account.	No. 3, Revenue Account.	No. 4, Interest Account.	No. 5, Indirect Charges Account.	No. 6, Statement comparing Outlay to date with Sanctioned Estimate.
Productive Public Works—	1					
Godávari Delta System		2	5	8	9	10
Kistna do.		11	13	15	16	17
Cauvery do.		18	19	21	22	23
Pennér Anicut System		24	26	30	31	32
Srívaikuntham Anicut System ...		33	34	38	39	40
Sangum Anicut		41	43	44	45	46
Irrigation and Navigation Works—	47					
Chembrambakam Tank		48	49	50	51	52
Pálár Anicut System		53	54	58	59	60
Pelandorai Anicut System ...		61	62	64	65	66
Buckingham Canal		67	68	70	71	72

IRRIGATION BRANCH. MADRAS PRESIDENCY.

PUBLIC WORKS DEPARTMENT.

ADMINISTRATIVE ACCOUNTS FOR THE YEAR 1881-82.

No. 1.—General Abstract of Financial Results showing the estimated cost of Construction of Irrigation and Navigation Works, the Capital outlay thereon, the Revenue derived therefrom, the Working Expenses, and the Interest on the debt incurred in respect of those works for and to end of 1881-82.

Productive Public Works.

Works.	Estimate Cost of Construction.	Capital Outlay inclusive of Indirect Charges, Nos. 2 and 5.		Receipts during 1881-82.								Working Expenses during the Year inclusive of Indirect Charges, Nos. 3 and 5.	Net Results excluding Interest.				Interest Charges during 1881-82.	Net Results including Interest.			
				Water-rates, &c.			Collected with Land Revenue.								Rate per cent.					Rate per cent.	
		During the Year.	To end of Year.	Realised in Public Works Department.	Realised in Revenue Department.	Total.	Portion of the consolidated assessment due to Irrigation not separated into Direct and Indirect.	Share of enhanced Land Revenue.	Total.	Old Maintenance Charges.	Total Receipts.		Excess Revenue (Surplus).	Excess Expenditure (Deficit).	Of Excess Revenue.	Of Excess Expenditure.		Excess Revenue (Surplus).	Excess Expenditure (Deficit).	Of Excess Revenue.	Of Excess Expenditure.
	1	2	3	4A	4B	4C	5A	5B	5C	6	7	8	9	10	11	12	13	14	15	16	17
	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.			Rs.	Rs.	Rs.		
Godávari Delta System.	1,30,32,653	1,17,214	1,07,95,332	99,949	15,33,710	16,33,659	..	1,58,871	17,92,530	..	17,92,530	4,41,840	13,50,690	..	12·51	..	3,58,814	9,91,876	..	9·18	..
Kistna Delta System.	1,66,70,813	1,20,272	61,17,778	39,557	8,75,643	9,15,200	..	1,28,562	10,43,762	..	10,43,762	3,30,653	7,13,109	..	11·65	..	2,24,658	4,88,451	..	7·98	..
Cauvery Delta System.	(a) 18,33,572	..	11,19,277	10,964	5,88,460	5,99,424	..	1,36,045	7,35,469	1,40,294	8,75,763	1,91,201	6,84,562	..	61·16	..	40,687	6,43,875	..	57·52	..
(c) Pennér Anicut System.	(a) 12,59,206	..	16,65,159	261	1,02,462	1,02,723	..	15,566	1,18,289	23,142	1,41,431	49,280	92,151	..	5·53	..	57,154	34,997	..	2·1	..
Srívaikuntham Anicut System.	11,71,527	1,059	12,98,151	1,036	62,645	63,681	..	1,921	65,602	7,384	72,986	27,994	44,992	..	3·46	..	48,957	..	3,965	..	2·1
(c) Sangum Anicut ..	(b) 35,69,049	1,85,943	2,37,073	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Total ..	..	4,24,488	2,12,32,770	1,51,767	31,62,920	33,14,687	..	4,40,965	37 55,652	1,70,820	39,26,472	10,40,968	28,85,504	..	..	..	7,30,270	21,59,199	3,965	..	..

(a) Made up of old outlay taken as estimate and current sanction.
(b) This System is under construction at present.
(c) The estimates for these Systems are being revised in the Chief Engineer's (for Irrigation) office.

MADRAS,
19th October 1882.

(Signed) G. BROWN,
for Examiner, Public Works Accounts.

PUBLIC WORKS DEPARTMENT.

ADMINISTRATIVE ACCOUNTS FOR THE YEAR 1881-82.

Godavari Delta System.

No. 2.—Capital Account for and to end of 1881-82.

Heads of Account.	Direct Charges.			Estimated Cost of Construction.
	Previous.	1881-82.	Total.	
	Rs.	Rs.	Rs.	Rs.
I.—Works.				
(1.)—*Head Works*—				
B. Land	...	...	...	896
C. Works	...	...	...	6,300
K. Buildings	36,214	...	36,214	45,393
Total ...	36,214	...	36,214	52,589
(2.)—*Main Canals and Branches*—				
B. Land	22,049	3,380	25,429	48,990
D. Regulators	42,796	...	42,796	42,794
E. Falls and weirs	17,278	...	17,278	5,580
F. River and hill torrent works ...	9,574	...	9,574	48,834
F (1). Other cross drainage works.	20,030	34,449	23,479	48,465
G. Bridges	17,615	— 16	17,599	29,978
H. Escapes	30,272	2,757	33,029	84,997
I. Navigation works	6,20,469	— 657	6,19,812	10,67,579
K. Buildings	...	...	..	...
L. Earthwork	5,95,317	1,547	5,96,864	9,50,662
O. Miscellaneous	48	...	48	4,900
Total ...	13,75,448	10,460	13,85,908	23,32,779
(3.)—*Distributaries*—				
B. Land	12,322	226	12,548	25,095
C. Works	1,57,501	11,914	1,69,415	3,06,169
L. Earthwork	1,22,756	9,978	1,32,734	1,92,917
O. Miscellaneous	...	...	...	1,172
Total ...	2,92,579	22,118	3,14,697	5,25,353

PUBLIC WORKS DEPARTMENT.

ADMINISTRATIVE ACCOUNTS FOR THE YEAR 1881-82.

GODAVARI DELTA SYSTEM.

No. 2.—Capital Account for and to end of 1881-82.

Heads of Account.	Direct Charges. Previous.	Direct Charges. 1881-82.	Direct Charges. Total.	Estimated Cost of Construction.
	Rs.	Rs.	Rs.	Rs.
I.—Works—(*continued*).				
(4)—*Drainage and Protective Works*—				
B. Land	18,536	1,343	19,879	38,047
C. Works	50,976	16,672	67,648	1,20,309
L. Earthwork	4,10,618	22,715	4,33,333	6,63,493
Total ...	4,80,130	40,730	5,20,860	8,21,849
Total, Estimate of unforeseen works ...	...	...	...	1,43,730
Total ...	21,84,371	73,308	22,57,679	38,76,300
Current Sanctions.				
Outlay on sanctions that have expired ...	42,99,072	...	42,99,072	42,99,072
Total, Works ...	64,83,443	73,308	65,56,751	81,75,372
II.—Establishment	16,20,861	17,091	16,37,952	20,11,645
III.—Tools and Plant	7,86,067	8,765	7,94,832	9,01,678
IV.—Suspense Accounts	31,025	...	31,025	...
Grand Total ...	89,21,398	99,164	90,20,560	1,10,88,695
V.—Less Receipts on Capital Account ...	620	...	620	...
Net Total ...	89,20,776	99,164	90,19,940	1,10,88,695

MADRAS,
19th October 1882.

(Signed) G. BROWN,
for Examiner, Public Works Accounts.

PUBLIC WORKS DEPARTMENT.

ADMINISTRATIVE ACCOUNTS FOR THE YEAR 1881-82.

GODAVARI DELTA SYSTEM.

No. 3.—Revenue Account for and to end of 1881-82.

Receipts.	Total.		
	Previous.	1881-82.	Total.
	Rs.	Rs.	Rs.
Receipts from plantations	1,12,154	649	1,12,803
Do. from other canal produce	19,741	8,981	28,722
Navigation receipts	5,33,153	62,117	5,95,270
Rent of buildings	2,118	82	2,200
Fines	...	52	52
Miscellaneous and other receipts	1,53,432	28,068	1,81,500
Total Revenue realized in the Public Works Department	8,20,598	99,949	9,20,547
Direct Revenue realized in the Civil Department	2,68,67,369	15,33,710	2,84,01,079
Total, Direct Revenue ...	2,76,87,967	16,33,659	2,93,21,626
Carried over ...	2,76,87,967	16,33,659	2,93,21,626

PUBLIC WORKS DEPARTMENT

ADMINISTRATIVE ACCOUNTS FOR THE YEAR 1881-82.

GODAVARI DELTA SYSTEM.

No. 3.—Revenue Account for and to end of 1881-82,

Charges.	Total. Previous.	Total. 1881-82.	Total. Total.
	Rs.	Rs.	Rs.
(1A.)—EXTENSIONS AND IMPROVEMENTS.			
(1.)—*Head Works*—			
C. Works	20,596	...	20,596
O. Miscellaneous	1,276	...	1,276
(2.)—*Main Canals and Branches*—			
B. Land	416	37	453
D. Regulators	6,109	68	6,177
E. Falls and weirs	1,036	...	1,036
F. River and hill torrent works ...	...	182	182
F (1). Other cross drainage works.	906	442	1,348
G. Bridges	663	...	663
I. Navigation Works	9,242	1,083	10,325
L. Earthwork	3,761	1,697	5,458
O. Miscellaneous	7,017	743	7,760
(3.)—*Distributaries*—			
B. Land	3,207	158	3,365
C. Works	14,189	7,327	21,516
L. Earthwork	11,711	1,700	13,411
N. Tanks and reservoirs	458	...	458
O. Miscellaneous	877	...	877
	...	...	...
(4.)—*Drainage and Protective Works*—			
B. Land	1,520	5	1,525
C. Works	1,858	2,129	3,987
L. Earthwork	6,496	865	7,361
Total ...	91,338	16,436	1,07,774
(IB.)—MAINTENANCE AND REPAIRS.			
(1.)—*Head Works*—			
C. Works	4,49,632	17,852	4,67,484
K. Buildings	4,229	1,344	5,573
O. Miscellaneous	430	2,000	2,430
Carried over ...	4,54,291	21,196	4,75,487

PUBLIC WORKS.

ADMINISTRATIVE ACCOUNTS

GODAVARI DELTA

No. 3.—Revenue Account

Receipts—(*Continued*).	TOTAL.		
	Previous.	1881-82.	Total.
	Rs.	Rs.	Rs.
Brought over ...	2,76,87,967	16,33,659	2,93,21,626
Share of land revenue collected in the Civil Department	34,42,115	1,58,871	36,00,986
Total ...	3,11,30,082	17,92,530	3,29,22,612

MADRAS,
12th October 1882.

DEPARTMENT.

FOR THE YEAR 1881-82.

SYSTEM.

for and to end of 1881-82.

Charges—(*Continued*).	TOTAL. Previous.	1881-82.	Total.
	Rs.	Rs.	Rs.
Brought over ...	4,54,291	21,196	4,75,487
(2.)—*Main Canals and Branches*—			
C. Works	1,45,407	7,077	1,52,484
I. Navigation Works	1,41,649	15,129	1,56,778
K. Buildings	649	1,071	1,720
L. Earthwork	3,32,924	39,085	3,72,009
M. Plantations	1,202	1,246	2,448
N. Tanks and reservoirs	891	...	891
O. Miscellaneous	13,472	1,864	15,336
(3.)—*Distributaries*—			
C. Works...	42,310	3,675	45,985
L. Earthwork	4,36,140	42,208	4,78,348
N. Tanks and reservoirs	443	...	443
O. Miscellaneous	9,261	...	9,261
(4.)—*Drainage and Protective Works*—			
C. Works	7,815	208	8,023
L. Earthwork	1,36,812	10,548	1,47,360
O. Miscellaneous	...	4	4
Total ...	17,23,266	1,43,311	18,66,577
Total, Extensions and Improvements and Maintenance and Repairs	18,14,604	1,59,747	19,74,351
Works not classified	27,27,548	...	27,27,548
Total, Works ...	45,42,152	1,59,747	47,01,899
II.—ESTABLISHMENT	22,17,332	1,00,235	23,17,567
III.—TOOLS AND PLANT	4,24,663	36,122	4,60,785
IV.—REFUNDS OF REVENUE	...	994	994
Total ...	71,84,147	2,97,098	74,81,245
Share of collection charges in the Civil Department	21,82,283	1,21,865	23,04,148
Total, Direct Charges ...	93,66,430	4,18,963	97,85,393
Indirect charges	4,71,183	22,877	4,94,060
Total, Direct and Indirect Charges	98,37,613	4,41,840	1,02,79,453
Balance, Net Revenue ...	2,12,92,469	13,50,690	2,26,43,159
Grand Total ...	3,11,30,082	17,92,530	3,29,22,612

(Signed) G. BROWN,
for Examiner, Public Works Accounts.

PUBLIC WORKS DEPARTMENT.

ADMINISTRATIVE ACCOUNTS FOR THE YEAR 1881-82.

GODAVARI DELTA SYSTEM.

No. 4.—Interest Account for and to end of 1881-82.

	Amount.		Amount.
	Rs.		Rs.
Total interest charges to end of 1880-81	74,50,898	Net Revenue realized to end of 1830-81	2,12,92,469
Total interest charges for the year 1881-82	3,58,814	Net Revenue realized during 1881-82	13,50,690
Balance Net Revenue ...	1,48,33,447		
Total ...	2,26,43,159	Total ...	2,26,43,159

MADRAS,
19th October 1882.

(Signed) G. BROWN,
for Examiner, Public Works Accounts.

PUBLIC WORKS' DEPARTMENT.

ADMINISTRATIVE ACCOUNTS FOR THE YEAR 1881-82.

Godavari Delta System.

No. 5.—Account of Indirect Charges for and to end of 1881-82.

Particulars.	Previous.	1881-82.	Total.
	Rs.	Rs.	Rs.
Capital—			
Capitalization of abatement of Land Revenue...	14,12,909	14,418	14,27,327
Leave and Pension Allowances	3,44,433	3,632	3,48,065
Total ...	17,57,342	18,050	17,75,392
Revenue—			
Capitalization of abatement of Land Revenue...	...	1,577	1,577
Leave and Pension Allowances	4,71,183	21,300	4,92,483
Total ...	4,71,183	22,877	4,94,060
Grand Total ...	22,28,525	40,927	22,69,452

Madras,
19th October 1882.

(Signed) G. BROWN,
for Examiner, Public Works Accounts.

IRRIGATION BRANCH. MADRAS PRESIDENCY.

PUBLIC WORKS DEPARTMENT.

ADMINISTRATIVE ACCOUNTS FOR THE YEAR 1881-82.

GODAVARI DELTA SYSTEM.

No. 6—Statement comparing Charges to date with Sanctioned Estimate.

Particulars.	Charges against old Sanctions that have expired.	Current Sanction.			Total Charges to date against old and current Sanctions.	Remarks.
		Charges to end of 1881-82.	Amount of Sanctioned Estimate.	Unspent Balance of Estimate.		
	Rs.	Rs.	Rs.	Rs.	Rs.	
Direct Charges.						
Works	42,99,073	22,57,679	38,76,300	16,18,621	65,56,751	
Establishment ...	8,93,686	7,44,266	11,17,959	3,73,693	16,37,952	Amount of estimate sanctioned by the Government of India in their Register, No. 3 I. of 1882-83, Rs. 1,30,32,653.
Tools and Plant ...	5,17,317	2,77,515	3,84,361	1,06,846	7,94,832	
Suspense Balances ...	...	31,025	...	— 31,025	31,025	
Total ...	57,10,075	33,10,485	53,78,620	20,68,135	90,20,560	
Less—Receipts on Capital Account ...	...	620	...	— 620	620	
Net Total ...	57,10,075	33,09,865	53,78,620	20,68,755	90,19,940	
Indirect Charges.						
Capitalized abatement of Land Revenue ...	12,10,217	2,17,110	3,26,147	1,09,037	14,37,327	
Loss by exchange ...	...	...	637	637	...	
Leave and Pension Allowances... ...	1,89,908	1,58,157	2,17,049	58,892	3,48,065	
Total ...	14,00,125	3,75,267	5,43,833	1,68,566	17,85,392	
Interest on direct outlay while work is under construction...	...	...	...	...	...	
Grand Total ...	71,10,200	36,85,132	59,22,453	22,37,321	1,07,95,332	

N.B.—In this statement the old outlay in Column 2 has been taken as estimate, and the same being deducted from the sanction accorded in G.O., No. 291 I., dated 28th March 1882, the net figures are shown in Column 4 as estimates for current sanctions.

MADRAS,
19th October 1882.

(Signed) G. BROWN,
for Examiner, Public Works Accounts.

PUBLIC WORKS DEPARTMENT.

ADMINISTRATIVE ACCOUNTS FOR THE YEAR 1881-82.

KISTNA DELTA SYSTEM.

No. 2.—Capital Account for and to end of 1881-82.

Heads of Account.	Direct Charges.			Estimated Cost of Construction.
	Previous.	1881-82.	Total.	
I.—WORKS—	Rs.	Rs.	Rs.	Rs.
(1).—*Head Works*—				
C. Works	372	...	372	1,30,500
Total ...	372	...	372	1,30,500
(2).—*Main Canals and Branches*—				
B. Land	12,416	2,793	15,209	33,700
D. Regulators	54,419	...	54,419	65,050
E. Falls and weirs	11,753	...	11,753	11,530
F. River and hill torrent works	...	...	...	6,88,015
F (1). Other cross drainage works	39,533	28,330	67,863	36,129
G. Bridges	21,424	788	22,212	1,58,033
H. Escapes	6,570	450	7,020	24,260
I. Navigation works ...	1,25,960	14,237	1,40,197	5,49,979
K. Buildings	2,925	...	2,925	26,813
L. Earthwork	6,68,045	43,150	7,11,195	22,07,221
O. Miscellaneous	...	...	...	36,815
P. Maintenance	...	...	...	32,000
Total ...	9,43,045	89,748	10,32,793	38,69,545
(3).—*Distributaries*—				
B. Land	718	46	764	99,160
C. Works	13,856	357	14,213	3,54,721
L. Earthwork	97,406	−105	97,301	7,75,035
O. Miscellaneous	...	...	...	31,453
Total ...	1,11,980	298	1,12,278	12,60,369

PUBLIC WORKS DEPARTMENT,

ADMINISTRATIVE ACCOUNTS FOR THE YEAR 1881-82

KISTNA DELTA SYSTEM.

No. 2.—Capital Account for and to end of 1881-82.

Heads of Account.	Direct Charges. Previous.	Direct Charges. 1881-82.	Direct Charges. Total.	Estimated Cost of Construction.
	Rs.	Rs.	Rs.	Rs.
I.—Works—(*Continued*).				
(4).—*Drainage and Protective Works*—				
B. Land	...	...	...	88,001
C. Works	...	...	...	3,37,616
L. Earthwork	3,052	...	3,052	15,37,633
O. Miscellaneous	...	...	...	37,386
Total ...	3,052	...	3,052	20,00,636
Unforeseen Outlay ...	...	...	...	2,18,722
Total, Outlay on current sanctions.	10,58,449	90,046	11,48,495	74,79,772
Outlay on sanctions that have expired.	30,81,755	...	30,81,755	30,81,755
Total, Works ...	41,40,204	90,046	42,30,250	1,05,61,527
II.—Establishment	10,49,438	24,849	10,74,287	26,73,382
III.—Tools and Plant	3,15,545	2,069	3,17,614	6,66,256
IV.—Suspense Accounts	55,315	...	55,315	...
Grand Total ...	55,60,502	1,16,964	56,77,466	13,901,165
V.—Less Receipts on Capital Account.	1,418	2,228	3,646	1,381
Net Total ...	55,59,084	1,14,736	(*a*) 56,73,820	(*b*) 1,38,99,784

(*a*) Includes the Expenditure on the Commamur Canal.—*Vide* paragraph 44 of the memorandum which accompanied the Annual Finance Accounts for 1881-82.
(*b*) For details *vide* Statement No. 6.

MADRAS,
19th October 1882.

(Signed) G. BROWN,
for Examiner, Public Works Accounts.

PUBLIC WORKS DEPARTMENT.

ADMINISTRATIVE ACCOUNTS FOR THE YEAR 1881-82.

KISTNA DELTA SYSTEM.

No. 3.—Revenue Account for and to end of 1881-82.

Receipts.	Total. Previous.	Total. 1881-82.	Total. Total.
	Rs.	Rs.	Rs.
Water-supply of towns	10,248	1,364	11,612
Receipts from plantations	15,425	583	16,008
Do. from other canal produce	11,454	2,508	13,962
Navigation receipts	1,79,409	31,982	2,11,391
Rent of buildings	62	15	77
Fines	...	17	17
Miscellaneous and other receipts	22,907	3,088	25,995
Total Revenue realized in the Public Works Department...	2,39,505	39,557	2,79,062
Direct Do. Civil Department ...	1,18,93,857	8,75,643	1,27,69,500
Total, Direct Revenue ...	1,21,33,362	9,15,200	1,30,48,562
Carried over ...	1,21,33,362	9,15,200	1,30,48,562

Charges.	Total. Previous.	Total. 1881-82.	Total. Total.
(IA.)—EXTENSIONS AND IMPROVEMENTS.	Rs.	Rs.	Rs.
(1.)—*Head Works*—			
O. Miscellaneous	176	...	176
(2.)—*Main Canals and Branches*—			
B. Land	700	44	744
D. Regulators	4,337	208	4,545
F (1). Other cross drainage works ...	218	264	482
G. Bridges	1,641	...	1,641
H. Escapes	2,515	...	2,515
I. Navigation Works	13,791	2,997	16,788
K. Buildings	957	709	1,666
L. Earthwork	3,890	...	3,890
N. Tanks and reservoirs	865	...	865
O. Miscellaneous	2,170	1,022	3,192
(3.)—*Distributaries*—			
B. Land	643	1,368	2,011
C. Works	14,154	1,828	15,982
L. Earthwork	9,686	255	9,941
N. Tanks and reservoirs	3,579	...	3,579
O. Miscellaneous	...	217	217
(4.)—*Drainage and Protective Works*—			
B. Land	...	391	391
C. Works	2,057	1,114	3,171
L. Earthwork	1,832	409	2,241
O. Miscellaneous	...	458	458
Total ...	63,211	11,284	74,495
(IB.)—MAINTENANCE AND REPAIRS.			
(1.)—*Head Works*—			
C. Works	1,73,790	17,272	1,91,062
K. Buildings	462	...	462
O. Miscellaneous	1,036	...	1,036
Carried over ...	2,38,499	28,556	2,67,055

PUBLIC WORKS DEPARTMENT.

ADMINISTRATIVE ACCOUNTS FOR THE YEAR 1881-82.

KISTNA DELTA SYSTEM.

No. 3.—Revenue Account for and to end of 1881-82.

Receipts—(*Continued*).	Total. Previous.	Total. 1881-82.	Total. Total.
	Rs.	Rs.	Rs.
Brought over ...	1,21,33,362	9,15,200	1,30,48,562
Share of Land Revenue collected in the Civil Department	20,03,767	1,28,562	21,32,329
Total, Receipts ...	1,41,37,129	10,43,762	1,51,80,891

Charges—(*Continued*).	Total. Previous.	Total. 1881-82.	Total. Total.
	Rs.	Rs.	Rs.
Brought over ...	2,38,499	28,556	2,67,055
(2.)—*Main Canals and Branches*—			
C. Works	53,217	4,040	57,257
I. Navigation Works	1,02,740	19,062	1,21,802
J. Mills	...	...	...
K. Buildings	422	789	1,211
L. Earthwork	7,11,207	60,315	7,71,522
M. Plantations	26,270	1,292	27,562
N. Tanks and reservoirs	21,513	..	21,513
O. Miscellaneous	787	947	1,734
(3.)—*Distributaries*—			
B. Land	2,727	−2,727	...
C. Works	14,721	3,829	18,550
L. Earthwork	2,30,170	27,678	2,57,848
M. Plantation	62	...	62
N. Tanks and reservoirs	562	...	562
O. Miscellaneous	3,500	20	3,520
(4.)—*Drainage and Protective Works*—			
C. Works	2,257	340	2,597
L. Earthwork	84,782	5,147	89,929
O. Miscellaneous	...	2,727	2,727
Add old outlay for which detailed classification is not obtained ...	9,10,934	...	9,10,934
Total, Extensions and Improvements and Maintenance and Repairs ...	24,04,370	1,52,015	25,56,385
II.—ESTABLISHMENT	11,92,948	71,907	12,64,855
III.—TOOLS AND PLANT	2,08,272	19,137	2,27,409
IV.—REFUNDS OF REVENUE	...	11	11
Total ...	38,05,590	2,43,070	40,48,660
Share of collection charges in the Civil Department	10,00,629	72,303	10,72,932
Total, Direct Charges ...	48,06,219	3,15,373	51,21,592
Indirect Charges ...	2,53,501	15,280	2,68,781
Total, Direct and Indirect Charges ...	50,59,720	3,30,653	53,90,373
Balance, Net Revenue ...	90,77,409	7,13,109	97,90,518
Grand Total ...	1,41,37,129	10,43,762	1,51,80,891

MADRAS,
19th October 1882.

(Signed) G. BROWN,
for Examiner, Public Works Accounts.

PUBLIC WORKS DEPARTMENT.

ADMINISTRATIVE ACCOUNTS FOR THE YEAR 1881-82.

KISTNA DELTA SYSTEM.

No. 4.—Interest Account for and to end of 1881-82.

	Amount.		Amount
	Rs.		Rs.
Total Interest Charges to end of 1880-81	43,63,595	Net Revenue realized to end of 1880-81	90,77,409
Total Interest Charges for the year 1881-82	2,24,658	Net Revenue realized during 1881-82	7,13,109
Balance Net Revenue	52,02,265		
Total ...	97,90,518	Total ...	97,90,518

MADRAS,
19th October 1882.

(Signed) G. BROWN,
for Examiner, Public Works Accounts.

PUBLIC WORKS DEPARTMENT.

ADMINISTRATIVE ACCOUNTS FOR THE YEAR 1881-82.

KISTNA DELTA SYSTEM.

No. 5.—Account of Indirect Charges for and to end of 1881-82.

Particulars.	Previous.	1881-82.	Total.
CAPITAL—	Rs.	Rs.	Rs.
Capitalization of abatement of Land Revenue ...	2,15,417	256	2,15,673
Leave and Pension Allowances	2,23,006	5,280	2,28,286
Total ...	4,38,423	5,536	4,43,959
REVENUE—			
Leave and Pension Allowances	2,53,501	15,280	2,68,781
Total ...	2,53,501	15,280	2,68,781
Grand Total ...	6,91,924	20,816	7,12,740

MADRAS,
19th October 1882.

(Signed) G. BROWN,
for Examiner, Public Works Accounts.

IRRIGATION BRANCH. MADRAS PRESIDENCY.

PUBLIC WORKS DEPARTMENT.

ADMINISTRATIVE ACCOUNTS FOR THE YEAR 1881-82.

KISTNA DELTA SYSTEM.

No. 6—Statement comparing Charges to date with Sanctioned Estimate.

Particulars.	Charges against old Sanctions that have expired.	Current Sanctions.			Total Charges to date against old and current Sanctions.	Remarks.
		Charges to end of 1881-82.	Amount of Sanctioned Estimate.	Unspent Balance of Estimate.		
	Rs.	Rs.	Rs.	Rs.	Rs.	
Direct Charges.						
Works	30,81,755	11,48,495	74,79,772	63,31,277	42,30,250	Estimate sanctioned by the Government of India in Register No. 23 I of 1881-82 .. Rs. 1,38,99,784 Add estimate for Indirect charges as given in G.O., No. 312 I, dated 12th May 1881. 27,71,029 Total .. 1,66,70,813
Establishment ...	7,21,715	3,52,572	19,51,667	15,99,095	10,74,287	
Tools and Plant...	1,96,981	1,20,633	4,69,275	3,48,642	3,17,614	
Suspense Balances.	...	55,315	...	**−55,315**	55,315	
Total ...	40,00,451	16,77,015	99,00,714	82,23,699	56,77,466	
Less—Receipts on Capital Account.	...	3,646	1,381	**−2,265**	3,646	
Net Total ...	40,00,451	16,73,369	98,99,333	82,25,964	56,73,820	
Indirect Charges.						
Capitalized abatement of Land Revenue.	1,31,185	84,488	3,33,094	2,48,606	2,15,673	
Loss by Exchange.	...	...	20,000	20,000	...	
Leave and Pension Allowances.	1,53,364	74,922	4,08,092	3,33,170	2,28,286	
Total ...	2,84,549	1,59,410	7,61,186	6,01,776	4,43,959	
Interest on direct outlay while work is under construction.	51,294	...	16,74,000	16,74,000	51,294	
Grand Total ...	43,36,294	18,32,779	1,23,34,519	1,05,01,740	61,69,073	

N.B.—In this statement the old outlay in Column 2 has been taken as estimate, and this being deducted from the sanction accorded in G.O., No. 291 I., dated 28th March 1882, the net figures are shown in Column 4 as estimates for current sanctions.

MADRAS,
19th October 1882.

(Signed) G. BROWN,
for Examiner, Public Works Accounts.

PUBLIC WORKS DEPARTMENT.

ADMINISTRATIVE ACCOUNTS FOR THE YEAR 1881-82.

Cauvery Delta System.

No. 2.—Capital Account for and to end of 1881-82.

Heads of Account.	Direct Charges.			Estimated Cost of Construction.
	Previous.	1881-82.	Total.	
	Rs.	Rs.	Rs.	Rs.
I.—Works	...	...	...	...
Outlay on completed works	7,78,216	...	7,78,216	7,78,216
Total, Works ...	7,78,216	...	7,78,216	7,78,216
II.—Establishment	1,94,554	...	1,94,554	1,94,554
III.—Tools and Plant	19,455	...	19,455	19,455
IV.—Suspense Accounts	24,957	...	24,957	...
Grand Total ...	10,17,182	...	10,17,182	9,92,225
V.—Less Receipts on Capital Account ...	8	...	8	...
Net Total ...	10,17,174	...	10,17,174	(a) 9,92,225

(a) Old outlay taken as estimate.

Madras,
19th October 1882.

(Signed), G. BROWN,
for Examiner, Public Works Accounts.

PUBLIC WORKS DEPARTMENT.

ADMINISTRATIVE ACCOUNTS FOR THE YEAR 1881-82.

CAUVERY DELTA SYSTEM.

No. 3.—Revenue Account for and to end of 1881-82.

Receipts.	Total. Previous.	Total. 1881-82.	Total. Total.
	Rs.	Rs.	Rs.
Receipts from plantations	25,165	5,678	30,843
Do. from other canal produce	3,445	4,468	7,913
Rent of buildings	27	67	94
Miscellaneous and other receipts	5,896	751	6,647
Total, Revenue realized in the Public Works Department ...	34,533	10,964	45,497
Total, Direct Revenue ...	34,533	10,964	45,497
Carried over ...	34,533	10,964	45,497

Charges.	Total. Previous.	Total. 1881-82.	Total. Total.
	Rs.	Rs.	Rs.
(1A.)—EXTENSIONS AND IMPROVEMENTS.			
(1.)—*Head Works*—			
C. Works	516	975	1,491
O. Miscellaneous	...	283	283
(2.)—*Main Canals and Branches*—			
D. Regulators	48,144	10,844	58,988
K. Buildings	498	...	498
L. Earthwork	675	...	675
N. Tanks and reservoirs	588	...	588
O. Miscellaneous	543	548	1,091
(3.)—*Distributaries*—			
B. Land	146	...	146
C. Works	32,025	5,129	37,154
L. Earthwork	1,198	...	1,198
O. Miscellaneous	172	...	172
(4.)—*Drainage and Protective Works*—			
C. Works	17,806	1,070	18,876
L. Earthwork	472	...	472
O. Miscellaneous	...	...	...
Total ...	1,02,783	18,849	1,21,632
(IB.)—MAINTENANCE AND REPAIRS—			
(1.)—*Head Works*—			
C. Works	45,080	12,139	57,219
K. Buildings	2,973	98	3,071
O. Miscellaneous	1,488	22	1,510
Carried over ...	49,541	12,259	61,800

PUBLIC WORKS DEPARTMENT.

ADMINISTRATIVE ACCOUNTS FOR THE YEAR 1881-82.

CAUVERY DELTA SYSTEM.

No. 3.—Revenue Account for and to end of 1881-82.

Receipts—(*Continued*).	Total. Previous.	Total. 1881-82.	Total. Total.
	Rs.	Rs.	Rs.
Brought over ...	34,533	10,964	45,497
Share of Land Revenue collected in the Civil Department	(*a*)2,03,66,828	(*b*)7,24,505	2,10,91,333
Add old maintenance charges saved to Government	63,13,230	1,40,294	64,53,524
Total Receipts ...	2,67,14,591	8,75,763	2,75,90,354

Charges—(*Continued*).	Total. Previous.	Total. 1881-82.	Total. Total.
	Rs.	Rs.	Rs.
Brought over ...	49,541	12,259	61,800
(2.)—*Main Canals and Branches*—			
C. Works	57,202	5,910	63,112
I. Navigation Works	72	...	72
J. Mills	...	...	...
K. Buildings	2,327	148	2,475
L. Earthwork	1,19,544	865	1,20,409
M. Plantations	...	...	...
N. Tanks and reservoirs	13,665	...	13,665
O. Miscellaneous	3,474	2,458	5,932
(3.)—*Distributaries*—			
C. Works	1,23,869	10,984	1,34,853
L. Earthwork	2,49,329	28,512	2,72,841
N. Tanks and reservoirs	1,649	...	1,649
O. Miscellaneous	4,448	3,902	8,350
(4.)—*Drainage and Protective Works*—			
C. Works	17,738	2,580	20,318
L. Earthwork	21,264	3,315	24,579
O. Miscellaneous	522	32	554
Total ...	6,64,644	65,965	7,30,609
Total, Extensions and Improvements, and Maintenance Repairs ...	7,67,427	84,814	8,52,241
Works not classified	36,62,547	...	36,62,547
Total, Works ...	44,29,974	84,814	45,14,788
II.—Establishment	12,80,429	42,930	13,23,359
III.—Tools and Plant	1,12,064	2,167	1,14,231
IV.—Refunds of Revenue	...	4	4
Total ...	58,22,467	1,29,915	59,52,382
Share of collection charges in the Civil Department.	14,66,412	52,164	15,18,576
Total, Direct Charges ...	72,88,879	1,82,079	74,70,958
Indirect Charges	2,72,091	9,122	2,81,213
Total, Direct and Indirect Charges ...	75,60,970	1,91,201	77,52,171
Balance, Net Revenue ...	1,91,53,621	6,84,562	1,90,38,183
Grand Total ...	2,67,14,591	8,75,763	2,75,90,354

(*a*) Consists of the amounts furnished by the Board of Revenue.
(*b*) Comprises the Direct and Indirect Results furnished by Mr. Wilson, C.S.

Madras,
19th October 1882.

(Signed) G. BROWN,
for Examiner, Public Works Accounts.

PUBLIC WORKS DEPARTMENT.

ADMINISTRATIVE ACCOUNTS FOR THE YEAR 1881-82.

CAUVERY DELTA SYSTEM.

No. 4.—Interest Account for and to end of 1881-82.

—	Amount.	—	Amount.
	Rs.		Rs.
Total Interest charges to end of 1880-81	10,78,233	Net Revenue realized to end of 1880-81	1,91,53,621
Total Interest charges for the year 1881-82	40,687	Net Revenue realized during 1881-82	6,84,562
Balance Net Revenue	1,87,19,263		
Total ...	1,98,38,183	Total ...	1,98,38,183

MADRAS,
19th October 1882.

(Signed) G. BROWN,
for Examiner, Public Works Accounts.

PUBLIC WORKS DEPARTMENT.

ADMINISTRATIVE ACCOUNTS FOR THE YEAR 1881-82.

CAUVERY DELTA SYSTEM.

No. 5.—Account of Indirect Charges for and to end of 1881-82.

Particulars.	Previous.	1881-82.	Total.
	RS.	RS.	RS.
CAPITAL—			
Capitalization of abatement of Land Revenue...	60,760	...	60,760
Leave and Pension Allowances	41,343	...	41,343
Total ...	1,02,103	...	1,02,103
REVENUE—			
Leave and Pension Allowances	2,72,091	9,122	2,81,213
Total ...	2,72,091	9,122	2,81,213
Grand Total ...	3,74,194	9,122	3,83,316

MADRAS,
19th October 1882.

(Signed) G. BROWN,
for Examiner, Public Works Accounts.

IRRIGATION BRANCH. MADRAS PRESIDENCY.

PUBLIC WORKS DEPARTMENT.

ADMINISTRATIVE ACCOUNTS FOR THE YEAR 1881-82.

CAUVERY DELTA SYSTEM.

No. 6.—Statement comparing Charges to date with Sanctioned Estimate.

Particulars.	Charges against old Sanctions that have expired.	Current Sanctions. Charges to end of 1881-82.	Current Sanctions. Amount of Sanctioned Estimate.	Current Sanctions. Unspent Balance of Estimate.	Total charges to date against old and Current Sanctions.	Remarks.
1	2	3	4	5	6	7
	Rs.	Rs.	Rs.	Rs.	Rs.	
Direct Charges.						
Works	7,78,216	...	5,28,750	5,28,750	7,78,216	Amount of estimate sanctioned in Government of India Register No. 20 I. of 1881-82 .. Rs. 6,88,000
Establishment ...	1,94,554	...	1,32,187	1,32,187	1,94,554	
Tools and Plant ...	19,455	...	27,063	27,063	19,455	Add indirect charges as per Proceedings of Madras Government, No. 644 I., dated 27th Sept. 1882 1,53,347
Suspense Balances ...	24,957	...	...	...	24,957	
Total ...	10,17,182	...	6,88,000	6,88,000	10,17,182	8,41,347
Less—Receipts on Capital Account ...	8	...	...	...	8	
Net Total ...	10,17,174	...	6,88,000	6,88,000	10,17,174	
Indirect Charges.						
Capitalized abatement of Land Revenue ...	60,760	...	44,437	44,437	60,760	
Leave and Pension Allowances ...	41,343	...	28,090	28,090	41,343	
Total ...	1,02,103	...	72,527	72,527	1,02,103	
Interest on direct outlay while work is under construction...	...	...	80,820	80,820	...	
Grand Total ...	11,19,277	...	8,41,347	8,41,347	11,19,277	

MADRAS,
19th October 1882.

(Signed) G. BROWN,
for Examiner, Public Works Accounts.

PUBLIC WORKS DEPARTMENT.

ADMINISTRATIVE ACCOUNTS FOR THE YEAR 1881-82.

PENNER ANICUT SYSTEM.

No. 2.—Capital Account for and to end of 1881-82.

Heads of Account.	Direct Charges. Previous.	Direct Charges. 1881-82.	Direct Charges. Total.	Estimated Cost of Construction.
I.—WORKS—	Rs.	Rs.	Rs.	Rs.
(1.)—*Head Works*—				
C. Works	1,43,750	...	1,43,750	1,18,370
Total ...	1,43,750	..	1,43,750	1,18,370
(2).—*Main Canals and Branches*—				
A. Preliminary expenses	315	...	315	...
B. Land	27,316	...	27,316	20,631
D. Regulators	34,909	...	34,909	31,219
E. Falls and weirs	6,103	...	6,103	6,460
F (1). Other cross drainage works.	12,448	...	12,448	11,470
G. Bridges	25,608	...	25,608	27,730
H. Escapes	1,997	...	1,997	1,670
L. Earthwork	1,73,352	...	1,73,352	1,82,401
N. Tanks and reservoirs	1,03,691	...	1,03,691	1,07,754
O. Miscellaneous	2,866	...	2,866	125
P. Maintenance	158	...	158	...
Total ...	3,88,763	...	3,88,763	3,89,460
(2A.)—*Reservoirs*—				
C. Works	14,699	...	14,699	15,600
Total ...	14,699	...	14,699	15,600
(3.)—*Distributaries*—				
B. Land	2,130	...	2,130	...
C. Works	12,439	...	12,439	9,240
L. Earthwork	13,186	...	13,186	10,400
O. Miscellaneous	240	...	240	...
Total ...	27,995	...	27,995	19,640

PUBLIC WORKS DEPARTMENT.

ADMINISTRATIVE ACCOUNTS FOR THE YEAR 1881-82.

Penner Anicut System.

No. 2.—Capital Account for and to end of 1881-82.

Heads of Account.	Direct Charges.			Estimated Cost of Construction.
	Previous.	1881-82.	Total.	
1.—Works—(*continued.*)	Rs.	Rs.	Rs.	Rs.
(4).—*Drainage and Protective Works*—				
B. Land	261	...	261	...
C. Works	46	...	46	...
L. Earthwork	12,677	...	12,677	8,200
O. Miscellaneous	31	...	31	...
Total ...	13,015	...	13,015	8,200
Total outlay on current sanctions ...	5,88,222	...	5,88,222	5,51,270
Outlay on sanctions that have expired ...	5,26,117	...	5,26,117	(*a*)5,26,117
Total, Works ...	11,14,339	...	11,14,339	10,77,387
II.—Establishment	2,78,585	...	2,78,585	(*b*)1,59,073
III.—Tools and Plant	27,858	...	27,858	(*b*) 22,746
IV.—Suspense Accounts	8,081	...	8,081	...
Grand Total ...	14,28,863	...	14,28,863	12,59,206
V.—Less Receipts on Capital Account ...	1	...	1	...
Net Total ...	14,28,862	...	14,28,862	12,59,206

(*a*) Outlay constitutes estimates.
(*b*) Made up of old outlay and the current estimates of Rs. 34,680 (for Establishment) and Rs. 8,860 (for Tools and Plant) sanctioned in G.O., No. 1134, dated 8th May 1876.

Madras,
19th October 1882.

(Signed) G. BROWN,
for Examiner, Public Works Accounts.

PUBLIC WORKS

ADMINISTRATIVE ACCOUNTS

PENNER ANICUT

No. 3.—Revenue Account for

Receipts.	Total.		
	Previous.	1881-82.	Total.
	Rs.	Rs.	Rs.
Receipts from Plantations	488	...	488
Do. from other Canal produce	417	261	678
Miscellaneous and other receipts	970	...	970
Total Revenue realized in the Public Works Department	1,875	261	2,136
Direct Revenue realized in the Civil Department	9,95,316	1,02,462	10,97,778
Total, Direct Revenue ...	9,97,191	1,02,723	10,99,914
Carried over ...	9,97,191	1,02,723	10,99,914

DEPARTMENT.

FOR THE YEAR 1881-82.

SYSTEM.

and to end of 1881-82.

Charges.	Total. Previous.	Total. 1881-82.	Total. Total.
	Rs.	Rs.	Rs.
(1A.)—EXTENSIONS AND IMPROVEMENTS.			
(2).—*Main Canals and Branches.*			
B. Land	1,392	...	1,392
D. Regulators	1,453	262	1,715
F (1.) Other cross drainage works ...	70	535	605
H. Escapes	...	...	...
K. Buildings	229	...	229
L. Earthwork	479	...	479
N. Tanks and Reservoirs	21,032	2,190	23,222
O. Miscellaneous	252	...	252
(2A.)—*Reservoirs.*			
C. Works	479	...	479
L. Earthwork	345	...	345
(3.)—*Distributaries.*			
B. Land	588	3,507	4,095
C. Works	4,490	18	4,508
L. Earthwork	507	202	709
O. Miscellaneous	430	...	430
(4.)—*Drainage and Protective Works.*			
C. Works	87	...	87
Amount for which classification is not obtainable	8,370	...	8,370
(IB.)—MAINTENANCE AND REPAIRS.			
(1.)—*Head Works.*			
C. Works	1,11,308	6,061	1,17,369
K. Buildings	...	200	200
O. Miscellaneous	...	199	199
Carried over ...	1,51,511	13,174	1,64,685

IRRIGATION BRANCH.

PUBLIC WORKS'

ADMINISTRATIVE ACCOUNTS

PENNER ANICUT

No. 3.—Revenue Account for

Receipts.	Total.		
	Previous.	1881-82.	Total.
	Rs.	Rs.	Rs.
Brought over ...	9,97,191	1,02,723	10,99,914
Share of Land Revenue collected in the Civil Department	2,21,087	15,566	2,36,653
Add old Maintenance Charges saved to Government	4,85,982	23,142	5,09,124
Total ...	17,04,260	1,41,431	18,45,691

(a).—The difference between this and the previous accounts is due to the inclusion of maintenance charges for another Government, No. 517 I., dated 6th July 1882.

MADRAS,
19th October 1882.

DEPARTMENT.

FOR THE YEAR 1881-82.

SYSTEM.

and to end of 1881-82.

Charges.	Total. Previous.	Total. 1881-82.	Total. Total.
	Rs.	Rs.	Rs.
Brought over ...	1,51,511	13,174	1,64,685
(2.)—*Main Canals and Branches.*			
C. Works	15,363	3,749	19,112
K. Buildings	157	...	157
L. Earthwork	36,291	585	36,876
N. Tanks and Reservoirs	89,229	4,625	93,854
O. Miscellaneous	58	...	58
(2A.)—*Reservoirs.*			
C. Works	3,445	892	4,337
L. Earthwork	12,834	179	13,013
(3.)—*Distributaries.*			
C. Works	6,531	899	7,430
L. Earthwork	40,749	406	41,155
N. Tanks and Reservoirs	128	70	198
(4.)—*Drainage and Protective Works.*			
C. Works	168	...	168
L. Earthwork	3,339	...	3,339
Amount for which classification is not obtainable	23,236	...	23,236
Total, Extensions and Improvements and Maintenance and Repairs ...	3,83,039	24,579	4,07,618
II.—ESTABLISHMENT	1,72,806	12,857	1,85,663
III.—TOOLS AND PLANT	9,636	614	10,250
IV.—REFUNDS OF REVENUE	...	...	...
Total ...	5,65,481	38,050	6,03,531
Share of Collection Charges in the Civil Department	87,581	8,498	96,079
Total, Direct Charges ...	6,53,062	46,548	6,99,610
Indirect Charges ...	36,721	2,732	39,458
Total, Direct and Indirect Charges (*a*) ...	6,89,783	49,280	7,39,063
Balance, Net Revenue ...	10,14,477	92,151	11,06,628
Grand Total ...	1,704,260	1,41,431	18,45,691

two years, 1860-61 and 1861-62, to agree with the revised revenue results of Mr. Wilson—*vide* Proceedings of Madras

(Signed) G. BROWN,
for Examiner, Public Works Accounts.

PUBLIC WORKS DEPARTMENT.

ADMINISTRATIVE ACCOUNTS FOR THE YEAR 1881-82.

PENNER ANICUT SYSTEM.

No. 4.—Interest Account for and to end of 1881-82.

—	Amount.	—	Amount.
	Rs.		Rs.
Total interest charges to end of 1880-81	9,60,224	Net Revenue realized to end of 1880-81	10,14,477
Total interest charges for the year 1881-82	57,154	Net Revenue realized during 1881-82	92,151
Balance Net Revenue	89,250		
Total ...	11,06,628	Total ...	11,06,628

MADRAS,
19th October 1882.

(Signed) G. BROWN,
for Examiner, Public Works Accounts.

PUBLIC WORKS DEPARTMENT.

ADMINISTRATIVE ACCOUNTS FOR THE YEAR 1881-82.

Penner Anicut System.

No. 5.—Account of Indirect Charges for and to end of 1881-82.

Particulars.	Previous.	1881-82.	Total.
	Rs.	Rs.	Rs.
Capital—			
Capitalization of abatement of Land Revenue...	1,77,098	...	1,77,098
Leave and Pension Allowances	59,199	...	59,199
Total ...	2,36,297	...	2,36,297
Revenue—			
Leave and Pension Allowances	36,721	2,732	39,453
Total ...	36,721	2,732	39,453
Grand Total ...	2,73,018	2,732	2,75,750

Madras,
19th October 1882.

(Signed) G. BROWN,
for Examiner, Public Works Accounts.

PUBLIC WORKS DEPARTMENT.

ADMINISTRATIVE ACCOUNTS FOR THE YEAR 1881-82.

Penner Anicut System.

No. 6.—Statement comparing Charges to date with Sanctioned Estimate.

Particulars.	Charges against old Sanctions that have expired.	Current Sanctions. Charges to end of 1881-82.	Current Sanctions. Amount of sanctioned Estimate.	Current Sanctions. Unspent Balance of Estimate.	Total Charges to date against old and current Sanctions.	Remarks.	
1	2	3	4	5	6	7	
	Rs.	Rs.	Rs.	Rs.	Rs.		Rs.
Direct Charges.							
Works	5,26,117	5,88,222	5,51,270	**—36,952**	11,14,339	Estimates sanctioned by Government of India in Register No. 7 A.I. of 1868-69	4,12,100
Establishment ...	1,24,393	1,54,192	34,680	**—1,19,512**	2,78,585		
Tools and Plant...	13,886	13,972	8,860	**— 5,112**	27,858		
Suspense Balances.	...	8,081	...	**— 8,081**	8,081	Do. do. by the Madras Government in their Order No. 12, dated 6th January 1869 ..	2,760
Total ...	6,64,396	7,64,467	5,94,810	**—1,69,657**	14,28,863		
Less—Receipts on Capital Account.	...	1	...	1	1		
Net Total ...	6,64,396	7,64,466	5,94,810	**—1,69,656**	14,28,862		
Indirect Charges.							
Capitalized abatement of Land Revenue.	16,403	1,60,695	...	**—1,60,695**	1,77,098	Do. do. No. 972, dated 23rd March 1869 ..	5,200
							4,20,060
Leave and Pension Allowances.	26,433	32,766	...	**—32,766**	59,199	Do. do. by the Government of India in No. 192 A. I. of 22nd April 1876 ..	1,59,150
Total ...	42,836	1,93,461	...	**—1,93,461**	2,36,297		
Interest on Direct Outlay while work is under construction.	40,385	...	...	...	40,385	Do. do. by the Madras Government in their Order No. 2604, dated 27th September 1876 ..	15,600
							5,94,810
Grand Total ...	7,47,617	9,57,927	5,94,810	**—3,63,117**	17,05,544		

Madras,
19th October 1882.

(Signed) G. BROWN,
for Examiner, Public Works Accounts.

PUBLIC WORKS DEPARTMENT.

ADMINISTRATIVE ACCOUNTS FOR THE YEAR 1881-82.

SRIVAIKUNTHAM ANICUT SYSTEM.

No. 2.—Capital Account for and to end of 1881-82.

Heads of Account.	Direct Charges.			Estimated Cost of Construction.
	Previous.	1881-82.	Total.	
	Rs.	Rs.	Rs.	Rs.
I.—WORKS.				
(1).—*Head Works.*				
B. Land	37,832	...	37,832	37,000
C. Works	1,98,439	...	1,98,439	1,99,800
K. Buildings	8,722	...	8,722	8,747
O. Miscellaneous	24,999	...	24,999	32,027
P. Maintenance	...	...	...	...
Total ...	2,69,992	...	2,69,992	2,77,574
(2.)—*Main Canals and Branches.*				
B. Land	...	312	312	1,865
D. Regulators	41,699	...	41,699	41,115
E. Falls and weirs	1,140	...	1,140	1,160
F(1.) Other cross drainage works.	19,845	...	19,845	20,440
G. Bridges	29,201	...	29,201	29,655
H. Escapes	11,696	...	11,696	11,780
L. Earthwork	1,79,924	...	1,79,924	1,79,380
N. Tanks and Reservoirs ...	1,72,895	...	1,72,895	1,77,572
Total ...	4,56,400	312	4,56,712	4,62,967
(3.)—*Distributaries.*				
B. Land	...	703	703	700
C. Works	53,447	34	53,481	55,542
L. Earthwork	1,08,074	...	1,08,074	1,12,607
N. Tanks and Reservoirs	27,700	...	27,700	27,680
Total ...	1,89,221	737	1,89,958	1,96,529
(4.)—*Drainage and Protective Works.*				
L. Earthwork	26,913	...	26,913	27,200
Total ...	26,913	...	26,913	27,200
Total, Works ...	9,42,526	1,049	9,43,575	9,64,270
II.—ESTABLISHMENT	2,70,737	8	2,70,745	1,81,413
III.—TOOLS AND PLANT	10,369	1	10,370	7,344
IV.—SUSPENSE ACCOUNTS	...	...	...	...
Grand Total ...	12,23,632	1,058	12,24,690	11,53,027
V.—LESS RECEIPTS ON CAPITAL ACCOUNT ...	240	...	240	...
Net Total ...	12,23,392	1,058	12,24,450	(*a*)11,53,027

(*a*) For details *vide* Statement No. 6.

MADRAS,
19th October 1882.

(Signed) G. BROWN,
for Examiner, Public Works Accounts.

SRIVAIKUNTHAM

No. 3.—Revenue Account for

Receipts.	TOTAL.		
	Previous.	1881-82.	Total.
	Rs.	Rs.	Rs.
Water-supply of Towns	4,003	628	4,631
Receipts from Plantations	2,171	139	2,310
Do. from other Canal produce	45	51	96
Rent of buildings	851	218	1,069
Miscellaneous and other receipts	1,108	...	1,1
Total, Revenue realized in the Public Works Department.	8,178	1,036	9,214
Carried over ...	...	...	...

DEPARTMENT.

FOR THE YEAR 1881-82.

ANICUT SYSTEM.

and to end of 1881-82.

Charges.	Total.		
	Previous.	1881-82.	Total.
	Rs.	Rs.	Rs.
(IA.)—EXTENSIONS AND IMPROVEMENTS.			
(1.)—*Head Works.*			
C. Works	100	...	100
(2.)—*Main Canals and Branches.*			
B. Land	136	...	136
D. Regulators	1,596	...	1,596
F (1.) Other cross drainage works ...	700	...	700
L. Earthwork	2,720	...	2,720
N. Tanks and Reservoirs	8,340	...	8,340
(3.)—*Distributaries.*			
B. Land	898	...	898
C. Works	1,528	108	1,636
L. Earthwork	3,298	...	3,298
N. Tanks and Reservoirs	4,548	533	5,081
O. Miscellaneous	69	...	69
(4.)—*Drainage and Protective Works.*			
C. Works	250	...	250
L. Earthwork	1,112	1,038	2,150
Total ...	25,295	1,679	26,974
(IB.)—MAINTENANCE AND REPAIRS.			
(1.)—*Head Works.*			
C. Works	5,904	...	5,904
K. Buildings	1,690	...	1,690
O. Miscellaneous	390	...	390
(2.)—*Main Canals and Branches.*			
C. Works	18,742	80	18,822
K. Buildings	660	16	676
L. Earthwork	52,667	2,687	55,354
M. Plantations	1,819	...	1,819
N. Tanks and Reservoirs	35,925	5,481	41,406
O. Miscellaneous	33	154	187
(3.)—*Distributaries.*			
C. Works	1,811	533	2,344
L. Earthwork	40,637	865	41,502
N. Tanks and Reservoirs	14,155	3,203	17,358
O. Miscellaneous	...	149	149
Carried over ...	...	...	...

PUBLIC WORKS

ADMINISTRATIVE ACCOUNTS

SRIVAIKUNTHAM

No. 3.—Revenue Account for

Receipts.	TOTAL.		
	Previous.	1881-82.	Total.
	Rs.	Rs.	Rs.
Brought over ...	...	...	...
Direct Revenue realized in the Civil Department.	3,18,467	62,645	3,81,112
Total, Direct Revenue ...	3,26,645	63,681	3,90,326
Share of Land Revenue collected in the Civil Department.	11,368	1,921	13,289
Add old Maintenance Charges saved to Government.	81,224	7,384	88,608
Total Receipts ...	4,19,237	72,986	4,92,223

MADRAS,
19th October 1882.

DEPARTMENT.

FOR THE YEAR 1881-82.

ANICUT SYSTEM.

and to end of 1881-82.

Charges.	Total. Previous.	Total. 1881-82.	Total. Total.
	Rs.	Rs.	Rs.
Brought over ...	...	...	...
(4.)—*Drainage and Protective Works.*			
C. Works	266	...	266
L. Earthwork	12,854	...	12,854
Total ...	1,87,553	13,168	2,00,721
Total, Extensions and Improvements and Maintenance and Repairs	2,12,848	14,847	2,27,695
(II.)—ESTABLISHMENT	76,826	6,605	83,431
(III.)—TOOLS AND PLANT	5,515	371	5,886
(IV.)—REFUNDS OF REVENUE	...	118	118
Total ...	2,95,189	21,941	3,17,130
Share of Collection Charges in the Civil Department	23,748	4,649	28,397
Total, Direct Charges ...	3,18,937	26,590	3,45,527
Indirect Charges	16,325	1,404	17,729
Total, Direct and Indirect Charges ...	3,35,262	27,994	3,63,256
Balance, Net Revenue ...	83,975	44,992	1,28,967
Grand Total ...	4,19,237	72,986	4,92,223

(Signed) G. BROWN,
for Examiner, Public Works Accounts.

PUBLIC WORKS DEPARTMENT.

ADMINISTRATIVE ACCOUNTS FOR THE YEAR 1881-82.

Srivaikuntham Anicut System.

No. 4.—Interest Account for and to end of 1881-82.

—	Amount.	—	Amount.
	Rs.		Rs.
Total Interest Charges to end of 1880-81	4,94,311	Net Revenue realized to end of 1880-81	83,975
Total Interest Charges for the year 1881-82	48,957	Net Revenue realized during 1881-82	44,992
		Balance Net Interest Charges ..	4,14,301
Total ...	5,43,268	Total ...	5,43,268

Madras,
19th October 1882.

(Signed) G. BROWN,
for Examiner, Public Works Accounts.

PUBLIC WORKS DEPARTMENT.

ADMINISTRATIVE ACCOUNTS FOR THE YEAR 1881-82.

Srivaikuntham Anicut System.

No. 5.—Account of Indirect Charges for and to end of 1881-82.

Particulars.	Previous.	1881-82.	Total.
	Rs.	Rs.	Rs.
Capital—			
Capitalization of abatement of Land Revenue...	16,168	...	16,168
Leave and Pension Allowances	57,532	1	57,533
Total ...	73,700	1	73,701
Revenue—			
Leave and Pension Allowances	16,325	1,404	17,729
Total ...	16,325	1,404	17,729
Grand Total ...	90,025	1,405	91,430

Madras,
19th October 1882.

(Signed) G. BROWN,
for Examiner, Public Works Accounts.

PUBLIC WORKS DEPARTMENT.

ADMINISTRATIVE ACCOUNTS FOR THE YEAR 1881-82.

SRIVAIKUNTHAM ANICUT SYSTEM.

No. 6.—Statement comparing Charges to date with Sanctioned Estimate.

Particulars.	Charges against old Sanctions that have expired.	Current Sanction. Charges to end of 1881-82.	Current Sanction. Amount of sanctioned Estimate.	Current Sanction. Unspent Balance Estimate.	Total Charges to date against old and current Sanctions.	Remarks.
1	2	3	4	5	6	7
	Rs.	Rs.	Rs.	Rs.	Rs.	
Direct Charges.						
Works	...	9,43,575	9,64,270	20,695	9,43,575	
Establishment ...	...	2,70,745	1,81,413	—89,332	2,70,745	Estimate sanctioned in Government of India Register No. 65 I. of 1875-76 .. .. RS. 11,38,087
Tools and Plant ...	...	10,370	7,344	—3,026	10,370	
Total ...	...	12,24,690	11,53,027	—71,663	12,24,690	Estimate sanctioned in Government of India Register No. 3 I. of 1879-80 33,440
Less—Receipts on Capital Account ...	...	240	...	—240	240	Total .. 11,71,527
Net Total ...	...	12,24,450	11,53,027	—71,423	12,24,450	
Indirect Charges.						
Capitalized abatement of Land Revenue ...	...	16,168	18,500	2,332	16,168	Revised estimate for Rs. (14,96,000) was submitted by the Madras Government in G.O., No. 380 I., dated 8th May 1882, but pending receipt of further information it is not sanctioned by the Government of India—*vide* their No. 289 I. dated 7th August 1882.
Leave and Pension Allowances	...	57,533	...	—57,533	57,533	
Total ...	...	73,701	18,500	—55,201	73,701	
Interest on Direct Outlay while work is under construction...	...	15,595	..	—15,595	15,595	
Grand Total ...	...	13,13,746	11,71,527	-1,42,219	13,13,746	

MADRAS,
19th October 1882.

(Signed) G. BROWN,
for Examiner, Public Works Accounts.

PUBLIC WORKS DEPARTMENT.

ADMINISTRATIVE ACCOUNTS FOR THE YEAR 1881-82.

SANGAM PROJECT.

No. 2.—Capital Account for and to end of 1881-82.

Heads of Account.	Direct Charges. Previous.	Direct Charges. 1881-82.	Direct Charges. Total.	Estimated Cost of Construction.
	Rs.	Rs.	Rs.	Rs.
I.—WORKS.				
(1.)—*Head Works.*				
A. Preliminary expenses	51,130	...	51,130	51,130
B. Land	...	...	...	800
C. Works	...	29,757	29,757	5,03,911
K. Buildings	...	18,892	18,892	25,185
O. Miscellaneous	...	4,992	4,992	40,635
Total ...	51,130	53,641	1,04,771	6,21,661
(2.)—*Main Canals and Branches.*				
B. Land	...	11,808	11,808	2,07,340
D. Regulators	...	6,309	6,309	1,06,654
E. Falls and weirs	...	6,799	6,799	25,000
G. Bridges	...	2,029	2,029	23,243
L. Earthwork	...	31,768	31,768	240,402
M. Plantation	...	...	...	4,000
N. Tanks and Reservoirs	...	3,207	3,207	2,22,460
O. Miscellaneous	...	2,897	2,897	7,082
Total ...	...	64,817	64,817	8,36,181
(3.)—*Distributaries.*				
B. Land	...	...	...	19,105
C. Works	...	2,064	2,064	4,58,240
L. Earthwork	...	...	...	3,93,855
N. Tanks and Reservoirs	...	...	...	11,450
Total ...	...	2,064	2,064	8,82,650

PUBLIC WORKS DEPARTMENT.

ADMINISTRATIVE ACCOUNTS FOR THE YEAR 1881-82.

SANGAM PROJECT.

No. 2.—Capital Account for and to end of 1881-82.

Heads of Account.	Direct Charges. Previous.	Direct Charges. 1881-82.	Direct Charges. Total.	Estimated Cost of Construction.
	Rs.	Rs.	Rs.	Rs.
I.—Works (*Continued*).	51,130	1,20,522	1,71,652	23,40,492
(4.)—*Drainage and Protective Works.*				
B. Land	...	...	...	325
C. Works	...	...	...	28,850
L. Earthwork	...	...	...	24,475
Total ...	...	...	...	53,650
Total, Works ...	51,130	1,20,522	1,71,652	23,94,142
II.—Establishment	...	27,132	27,132	4,89,560
III.—Tools and Plant	...	32,523	32,523	1,42,354
IV.—Suspense Accounts	...	...	...	...
Grand Total ...	51,130	1,80,177	2,31,307	30,26,056
V.—Less Receipts on Capital Account.	...	...	...	1,29,619
Net Total ...	51,130	1,80,177	2,31,307	28,96,437

MADRAS,
19th October 1882.

(Signed) G. BROWN,
for Examiner, Public Works Accounts.

IRRIGATION BRANCH. MADRAS PRESIDENCY.

PUBLIC WORKS DEPARTMENT.

ADMINISTRATIVE ACCOUNTS FOR THE YEAR 1881-82.

SANGAM PROJECT.

No. 3.—Revenue Account for and to end of 1881-82.

Receipts.	Total.			Charges.	Total.		
	Previous.	1881-82.	Total.		Previous.	1881-82.	Total.
	Rs.	Rs.	Rs.		Rs.	Rs.	Rs.
Nil.				*Nil.*			

MADRAS,
19th October 1882.

(Signed) G. BROWN,
for Examiner, Public Works Accounts.

PUBLIC WORKS DEPARTMENT.

ADMINISTRATIVE ACCOUNTS FOR THE YEAR 1881-82.

SANGAM PROJECT.

No. 4.—Interest Account for and to end of 1881-82.

	Amount.		Amount.
	Rs.		Rs.
Total Interest Charges to end of 1880-81	...	Net Revenue realized to end of 1880-81	...
Total Interest Charges for the year 1881-82	5,649	Net Revenue realized during 1881-82	...
		Balance Net Interest Charges ...	5,649
Total ...	5,649	Total ...	5,649

MADRAS,
19th October 1882.

(Signed) G. BROWN,
for Examiner, Public Works Accounts.

PUBLIC WORKS DEPARTMENT.

ADMINISTRATIVE ACCOUNTS FOR THE YEAR 1881-82.

SANGAM PROJECT.

No. 5.—Account of Indirect Charges for and to end of 1881-82.

Particulars.	Previous.	1881-82.	Total.
	Rs.	Rs.	Rs.
CAPITAL—			
Capitalization of abatement of Land Revenue ...	(a)	(a)	(a)
Leave and Pension Allowances	...	5,766	5,766
Total ...	...	5,766	5,766
Total ...	...	...	...
Grand Total ...	...	5,766	5,766

(a) Not calculated yet for want of information as to revenue lost in consequence of taking up of land.

MADRAS,
9th October 1882.

(Signed) G. BROWN,
for Examiner, Public Works Accounts.

PUBLIC WORKS DEPARTMENT.

ADMINISTRATIVE ACCOUNTS FOR THE YEAR 1881-82.

SANGAM PROJECT.

No. 6.—Statement comparing Charges to-date with sanctioned Estimate.

Particulars.	Charges against old Sanctions that have expired.	Current Sanctions. Charges to end of 1881-82.	Amount of sanctioned Estimate.	Unspent Balance of Estimate.	Total Charges to date against old and current Sanctions.	Remarks.
1	2	3	4	5	6	7
	Rs.	Rs.	Rs.	Rs.	Rs.	
Direct Charges.						
Works	...	1,71,652	23,94,142	22,22,490	1,71,652	
Establishment ...	...	27,132	4,89,560	4,62,428	27,132	Estimate sanctioned in Government of India Register No. 4 I. of 1881-82, Rs. 35,69,049.
Tools and Plant ...	...	32,523	1,42,354	1,09,831	32,523	
Total ...	...	2,31,307	30,26,056	27,94,749	2,31,307	
Less—Receipts on Capital Account.	...	...	1,29,619	−1,29,619	...	
Net Total ...	...	2,31,307	28,96,437	26,65,130	2,31,307	
Indirect Charges.						
Capitalized abatement of Land Revenue.	...	...	5,28,000	5,28,000	...	
Leave and Pension Allowances.	...	5,766	1,44,612	1,38,846	5,766	
Total ...	...	5,766	6,72,612	6,66,846	5,766	
Interest on Direct Outlay while work is under construction.	...	...	...	...	...	
Grand Total ...	...	2,37,073	35,69,049	33,31,976	2,37,073	

MADRAS,
19th October 1882.

(Signed) G. BROWN,
for Examiner, Public Works Accounts.

IRRIGATION BRANCH. MADRAS PRESIDENCY.

PUBLIC WORKS DEPARTMENT.

ADMINISTRATIVE ACCOUNTS FOR THE YEAR 1881-82.

No. 1.—General Abstract of Financial Results showing the Estimated Cost of Construction of Irrigation and Navigation Works, the Capital Outlay thereon, the Revenue derived therefrom, the Working Expenses, and the Interest on the Debt incurred in respect of those works for and to end of 1881-82.

Irrigation and Navigation Works.

Works.	Estimated Cost of Construction.	Capital Outlay inclusive of Indirect Charges, Nos. 2 and 5. — During the Year.	Capital Outlay — To end of Year.	Receipts during 1881-82. — Water-rates, &c. (4) — Realized in Public Works Department.	Water-rates, &c. — Realized in Revenue Department.	Water-rates, &c. — Total.	Collected with Land Revenue (5) — Portion of the Consolidated Assessment due to Irrigation not separated into Direct and Indirect.	Collected with Land Revenue — Share of enhanced Land Revenue.	Collected with Land Revenue — Total.	Old Maintenance Charges.	Total Receipts.	Working Expenses during the Year inclusive of Indirect Charges, Nos. 3 and 5.	Net Results excluding Interest. — Excess Revenue (Surplus).	Excess Expenditure (Deficit).	Rate per Cent. — Of Excess Revenue.	Rate per Cent. — Of Excess Expenditure.	Interest Charges during 1881-82.	Net Results including Interest. — Excess Revenue (Surplus).	Excess Expenditure (Deficit).	Rate per Cent. — Of Excess Revenue.	Rate per Cent. — Of Excess Expenditure.
	1	2	3	4A	4B	4C	5A	5B	5C	6	7	8	9	10	11	12	13	14	15	16	17
	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.			Rs.	Rs.	Rs.		
Chembrambakam tank	7,36,958	12,017	7,36,800	12	35,887	35,899	..	574	36,473	7,145	43,618	8,021	35,597	..	4·83	..	24,755	10,842	..	1·47	..
Pálár Anicut System.	*	30,897	18,23,827	248	92,694	92,942	..	13,783	1,06,725	4,101	1,10,826	39,795	71,031	..	3·89	..	68,688	2,343	..	·12	..
Pelandorai Anicut System	4,62,643	43,112	3,64,334	..	− 12	− 12	..	65	53	155	208	67,100	..	66,892	..	18·36	12,434	..	79,326	..	21·7
Total ..	..	86,026	29,24,961	260	1,28,569	1,28,829	..	14,422	1,43,251	11,401	1,54,652	1,14,916	1,06,628	66,892	..	..	1,05,877	13,185	79,326	..	..
Provincial.																					
Buckingham Canal ..	..	1,34,214	†	1,26,496	..	1,26,496	..	..	1,26,496	..	1,26,496	1,17,430	9,066	†	†	†	†	†	†	†	†

* A completion estimate for this system is under preparation in the Chief Engineer's (for Irrigation) Office.

† The Capital and Revenue Accounts of this system not having been completed as yet these columns cannot be filled in for this system.

MADRAS,
19th October 1882.

(Signed) G. BROWN,
for Examiner, Public Works Accounts.

PUBLIC WORKS DEPARTMENT.

ADMINISTRATIVE ACCOUNTS FOR THE YEAR 1881-82.

Chembrambakam Tank.

No. 2.—Capital Account for and to end of 1881-82.

Heads of Account.	Direct Charges. Previous.	Direct Charges. 1881-82.	Direct Charges. Total.	Estimated Cost of Construction.
	Rs.	Rs.	Rs.	Rs.
I.—Works.				
(2A.)—*Reservoirs.*				
B. Land	1,01,133	10,240	1,11,373	1,15,237
C. Works	99,557	...	99,557	1,02,887
L. Earthwork	2,19,453	...	2,19,453	2,34,916
O. Miscellaneous	61,729	...	61,729	62,981
Total ...	4,81,872	10,240	4,92,112	5,16,021
II.—Establishment	1,23,150	1,384	1,24,534	1,34,042
III.—Tools and Plant	8,105	99	8,204	5,247
IV.—Suspense Accounts	...	...	...	...
Grand Total ...	6,13,127	11,723	6,24,850	6,55,310
V.—Less Receipts on Capital Account ...	114	...	114	...
Net Total ...	6,13,013	11,723	6,24,736	6,55,310

Madras,
19th October 1882.

(Signed) G. BROWN,
for Examiner Public Works Accounts.

PUBLIC WORKS DEPARTMENT.

ADMINISTRATIVE ACCOUNT FOR THE YEAR 1881-82.

CHEMBRAMBAKAM TANK.

No. 3.—Revenue Account for and to end of 1881-82.

Receipts.	Total. Previous.	Total. 1881-82.	Total. Total.
	Rs.	Rs.	Rs.
Receipts from Plantations	82	...	82
Do. from other Canal produce ...	89	12	101
Rent of buildings	7	...	7
Miscellaneous and other receipts	132	...	132
Total Revenue realized in the Public Works Department	310	12	322
Direct Revenue realized in the Civil Department	2,41,465	35,887	2,77,352
Total, Direct Revenue ...	2,41,775	35,899	2,77,674
Share of Land Revenue collected in the Civil Department	3,917	574	4,491
Add old Maintenance Charges saved to Government	78,595	7,145	85,740
Total, Receipts ...	3,24,287	43,618	3,67,905

Charges.	Total. Previous.	Total. 1881-82.	Total. Total.
	Rs.	Rs.	Rs.
(1A.)—EXTENSIONS AND IMPROVEMENTS.			
(2A.)—*Reservoirs.*			
B. Land	...	...	...
C. Works	366	224	590
L. Earthwork	1,277	...	1,277
O. Miscellaneous	266	...	266
Total ...	1,909	224	2,133
(1B.)—MAINTENANCE AND REPAIRS.			
(2A.)—*Reservoirs.*			
C. Works...	36,665	...	36,665
L. Earthwork	33,197	2,940	36,137
O. Miscellaneous	735	...	735
Total ...	70,597	2,940	73,537
Total, Extensions and Improvments and Maintenance and Repairs...	72,506	3,164	75,670
(II.)—ESTABLISHMENT	32,783	1,788	34,571
(III.)—TOOLS AND PLANT	1,185	79	1,264
(IV.)—REFUNDS OF REVENUE	...	...	...
Total ...	1,06,474	5,031	1,11,505
Share of Collection Charges in the Civil Department.	17,668	2,625	20,293
Total, Direct Charges ...	(a) 1,24,142	7,656	1,31,798
Indirect Charges	6,952	365	7,317
Total, Direct and Indirect Charges ...	1,31,094	8,021	1,39,115
Balance, Net Revenue ...	1,93,193	35,597	2,28,790
Grand Total ...	3,24,287	43,618	3,67,905

(a) This is in excess of the amount shown last year by Rs. 1,729, owing to the inclusion of the maintenance charges for 1870-71 to agree with the revised results of revenue furnished by Mr. Wilson in Proceedings, Madras Government, No. 517 I., dated 6th July 1882.

MADRAS,
19th October 1882.

(Signed) G. BROWN,
for Examiner, Public Works Accounts.

PUBLIC WORKS DEPARTMENT.

ADMINISTRATIVE ACCOUNTS FOR THE YEAR 1881-82.

CHEMBRAMBAKAM TANK.

No. 4.—Interest Account for and to end of 1881-82.

	Amount.		Amount.
	Rs.		Rs.
Total Interest Charges to end of 1880-81	2,36,390	Net Revenue realized to end of 1880-81	1,93,193
Total Interest Charges for the year 1881-82	24,755	Net Revenue realized during 1881-82	35,597
		Balance, Net Interest Charges ...	32,355
Total ...	2,61,145	Total ...	2,61,145

MADRAS,
19th October 1882.

(Signed) G. BROWN,
for Examiner, Public Works Accounts.

PUBLIC WORKS DEPARTMENT.

ADMINISTRATIVE ACCOUNTS FOR THE YEAR 1881-82.

CHEMBRAMBAKAM TANK.

No. 5.—Account of Indirect Charges for and to end of 1881-82.

Particulars.	Previous.	1881-82.	Total.
	Rs.	Rs.	Rs.
CAPITAL—			
Capitalization of abatement of Land Revenue.	85,601	...	85,601
Leave and Pension Allowances	26,169	294	26,463
Total ...	1,11,770	294	1,12,064
REVENUE—			
Leave and Pension Allowances	6,952	365	7,317
Total ...	6,952	365	7,317
Grand Total ...	1,18,722	659	1,19,381

MADRAS,
10th October 1882.

(Signed) G. BROWN,
for Examiner, Public Works Accounts.

PUBLIC WORKS DEPARTMENT.

ADMINISTRATIVE ACCOUNTS FOR THE YEAR 1881-82.

CHEMBRAMBAKAM TANK.

No. 6.—Statement comparing Charges to date with Sanctioned Estimate.

Particulars.	Charges against old Sanctions that have expired.	Current Sanctions. Charges to end of 1881-82.	Amount of sanctioned Estimate.	Unspent Balance of Estimate.	Total Charges to date against old and Current Sanctions.	Remarks.	
1	2	3	4	5	6	7	
Direct Charges.	Rs.	Rs.	Rs.	Rs.	Rs.		Rs.
Works	...	4,92,112	5,16,021	23,909	4,92,112	Estimate sanctioned in Government of India Register No. 31 I. of 1877-78, printed in G.O., No. 515 I., dated 22nd November 1877..	6,43,000
Establishment ...	...	1,24,534	1,34,042	9,508	1,24,534		
Tools and Plant ...	...	8,204	5,247	**−2,957**	8,204		
Total ...	...	6,24,850	6,55,310	30,460	6,24,850		
Less—Receipts on Capital Account...	...	114	...	114	114	Additional estimate sanctioned by Madras Government in G.O., No. 735 I., dated 19th December 1879	12,310
Net Total ...	...	6,24,736	6,55,310	30,574	6,24,736		6,55,310
Indirect Charges.							
Capitalized abatement of Land Revenue	...	85,601	(*a*)50,000	**−35,601**	35,601		
Leave and Pension Allowances ...	...	26,463	(*a*)31,648	5,185	26,463		
Total ...	...	1,12,064	81,648	**−30,416**	1,12,064		
Interest on Direct Outlay while work is under construction	...	11,950	...	**−11,950**	11,950		
Grand Total ...	...	7,48,750	7,36,958	**−11,792**	7,48,750		

(*a*) Shown in G.O., No. 102 I., dated 25th June 1877.

MADRAS,
19th October 1882.

(Signed) G. BROWN,
for Examiner, Public Works Accounts.

PUBLIC WORKS DEPARTMENT.

ADMINISTRATIVE ACCOUNTS FOR THE YEAR 1881-82.

PALAR ANICUT SYSTEM.

No. 2.—Capital Account for and to end of 1881-82.

Heads of Account.	Direct Charges. Previous.	Direct Charges. 1881-82.	Direct Charges. Total.	Estimated Cost of Construction.
	Rs.	Rs.	Rs.	Rs.
I.—WORKS.				
(2.)—*Main Canals and Branches.*				
B. Land	3,431	...	3,431	...(*a*)
D. Regulators	5,549	5,298	10,847	...
E. Falls and weirs	153	7,977	8,130	...
G. Bridges	...	4,476	4,476	...
L. Earthwork	2,79,537	3,996	2,83,533	...
O. Miscellaneous	1,571	361	1,932	...
Total Outlay on Current Sanctions ...	2,90,241	22,108	3,12,349	...
Outlay to end of previous year on completed works.	10,26,978	...	10,26,978	...
Total, Works ...	13,17,219	22,108	13,39,327	...
II.—ESTABLISHMENT	3,54,140	6,583	3,60,723	...
III.—TOOLS AND PLANT	31,232	552	31,784	...
IV.—SUSPENSE ACCOUNTS	...	...	...	...
Grand Total ...	17,02,591	29,243	17,31,834	...
V.—LESS RECEIPTS ON CAPITAL ACCOUNT ...	...	...	...	...
Net Total ...	17,02,591	29,243	17,31,834	...

(*a*) This column has been left blank pending the receipt of complete estimates of the system under preparation in Chief Engineer's (for Irrigation) Office.

MADRAS,
19th October 1882.

(Signed) G. BROWN,
Examiner, Public Works Accounts.

PALAR ANICUT

No. 3.—Revenue Account for

Receipts.	Total. Previous.	Total. 1881-82.	Total. Total.
	Rs.	Rs.	Rs.
Receipts from Plantations	533	58	591
Do. from other Canal produce	232	170	402
Miscellaneous and other receipts	751	20	771
Total Revenue realized in the Public Works Department	1,516	248	1,764
Direct Revenue realized in the Civil Department ...	9,10,164	92,694	10,02,858
Total, Direct Revenue ...	9,11,680	92,942	10,04,622
Carried over ...	9,11,680	92,942	10,04,622

DEPARTMENT.

FOR THE YEAR 1881-82.

SYSTEM.

and to end of 1881-82.

Charges.	Total.		
	Previous.	1881-82.	Total.
	Rs.	Rs.	Rs.
(1A.)—EXTENSIONS AND IMPROVEMENTS.			
(1.)—*Head Works.*			
C. Works	1,397	...	1,397
K. Buildings	...	78	78
O. Miscellaneous	378	9	387
(2.)—*Main Canals and Branches.*			
B. Land	1,151	20	1,171
D. Regulators	3,715	...	3,715
L. Earthwork	2,691	...	2,691
M. Plantations	...	...	...
N. Tanks and Reservoirs	31,838	1,688	33,526
O. Miscellaneous	308	25	333
(4.)—*Drainage and Protective Works.*			
L. Earthwork	340	...	340
Total ...	41,818	1,820	43,638
(1B.)—MAINTENANCE AND REPAIRS.			
(1.)—*Head Works.*			
C. Works	22,581	1,124	23,705
K. Buildings	495	155	650
O. Miscellaneous	190	...	190
Carried over ...	23,266	1,279	24,545

PUBLIC WORKS

ADMINISTRATIVE ACCOUNTS

PALAR ANICUT

No. 3.—Revenue Account for

Receipts.	Total.		
	Previous.	1881-82.	Total.
	Rs.	Rs.	Rs.
Brought over ...	9,11,680	92,942	10,04,622
Share of Land Revenue collected in the Civil Department	2,89,066	13,783	3,02,849
Add old Maintenance Charges saved to Government.	1,14,828	4,101	1,18,929
Total Receipts ...	13,15,574	1,10,826	14,26,400

MADRAS,
19th October 1882.

DEPARTMENT.

FOR THE YEAR 1881-82.

SYSTEM.

and to end of 1881-82.

Charges.	Total.		
	Previous.	1881-82.	Total.
	Rs.	Rs.	Rs.
Brought over ...	23,266	1,279	24,545
(2.)—*Main Canals and Branches.*			
C. Works	16,770	294	17,064
K. Buildings	...	277	277
L. Earthwork	62,679	4,654	67,333
N. Tanks and Reservoirs	2,73,136	11,948	2,85,084
O. Miscellaneous	15	87	102
(4.)—*Drainage and Protective Works.*			
L. Earthwork	5,742	...	5,742
Total ...	3,81,608	18,539	4,00,147
Total, Extensions and Improvements, Maintenance and Repairs	4,23,426	20,359	4,43,785
Works not classified	1,31,997	...	1,31,997
Total, Works ...	5,55,423	20,359	5,75,782
(II.)—ESTABLISHMENT	1,83,026	9,196	1,92,222
(III.)—TOOLS AND PLANT	12,221	620	12,841
(IV.)—REFUNDS OF REVENUE	...	...	...
Total ...	7,50,670	30,175	7,80,845
Share of Collection Charges in the Civil Department.	86,345	7,666	94,011
Total, Direct Charges ...	8,37,015	37,841	8,74,856
Indirect Charges	38,893	1,954	40,847
Total, Direct and Indirect Charges ...	8,75,908	39,795	9,15,703
Balance, Net Revenue ...	4,39,666	71,031	5,10,697
Grand Total ...	13,15,574	1,10,826	14,26,400

(Signed) G. BROWN,
for Examiner, Public Works Accounts.

PUBLIC WORKS DEPARTMENT.

ADMINISTRATIVE ACCOUNTS FOR THE YEAR 1881-82.

PALAR ANICUT SYSTEM.

No. 4.—Interest Account for and to end of 1881-82.

	Amount.		Amount.
	Rs.		Rs.
Total Interest Charges to end of 1880-81	12,36,006	Net Revenue realized to end of 1880-81	4,39,666
Total Interest Charges for the year 1881-82	68,688	Net Revenue realized during 1881-82	71,031
		Balance, Net Interest Charges.	7,93,997
Total ...	13,04,694	Total ...	13,04,694

MADRAS,
19th October 1882.

(Signed) G. BROWN,
for Examiner, Public Works Accounts.

PUBLIC WORKS DEPARTMENT.

ADMINISTRATIVE ACCOUNTS FOR THE YEAR 1881-82.

PALAR ANICUT SYSTEM.

No. 5.—Account of Indirect Charges for and to end of 1881-82.

Particulars.	Previous.	1881-82.	Total.
	Rs.	Rs.	Rs.
CAPITAL—			
Capitalization of abatement of Land Revenue...	15,085	255	15,340
Leave and Pension Allowances	75,254	1,399	76,653
Total ...	90,339	1,654	91,993
REVENUE—			
Leave and Pension Allowances	38,893	1,954	40,847
Total ...	38,893	1,954	40,847
Grand Total ...	1,29,232	3,608	1,32,840

MADRAS,
19th October 1882.

(Signed) G. BROWN,
for Examiner, Public Works Accounts.

PUBLIC WORKS DEPARTMENT.

ADMINISTRATIVE ACCOUNTS FOR THE YEAR 1881-82.

PALAR ANICUT SYSTEM.

No. 6.—Statement comparing Charges to date with Sanctioned Estimate.

Particulars.	Charges against old Sanctions that have expired.	Current Sanctions.			Total Charges to date against old and current Sanctions.	Remarks.
		Charges to end of 1881-82.	Amount of sanctioned Estimate.	Unspent Balance of Estimate.		
1	2	3	4	5	6	7
Direct Charges.	Rs.	Rs.	Rs.	Rs.	Rs.	
Works	10,26,978	3,12,349	(a)...	...	13,39,327	
Establishment	2,68,675	92,048	...	...	3,60,723	
Tools and Plant	23,845	7,939	...	...	31,784	
Total ...	13,19,498	4,12,336	...	...	17,31,834	
Less Receipts on Capital Account	...	...	...	...	...	
Net Total ...	13,19,498	4,12,336	...	...	17,31,834	
Indirect Charges.						
Capitalized abatement of Land Revenue	15,085	255	...	...	15,340	
Leave and Pension Allowances.	57,093	19,560	...	...	76,653	
Total ...	72,178	19,815	...	...	91,993	
Interest on Direct Outlay while work is under construction ...	...	...	...	...	...	
Grand Total ...	13,91,676	4,32,151	...	...	18,23,827	

(a) *Vide* remark at foot of Statement No. 2.

MADRAS,
19th October 1882.

(Signed) G. BROWN,
for Examiner, Public Works Accounts.

PUBLIC WORKS DEPARTMENT.

ADMINISTRATIVE ACCOUNTS FOR THE YEAR 1881-82.

PELANDORAI ANICUT SYSTEM.

No. 2.—Capital Account for and to end of 1881-82.

Heads of Account.	Direct Charges. Previous.	1881-82.	Total.	Estimated Cost of Construction.
	Rs.	Rs.	Rs.	Rs.
I.—WORKS.				
(1.)—*Head Works.*				
C. Works	87,264	18,934	1,06,198	99,623
K. Buildings	2,240	...	2,240	2,240
O. Miscellaneous	2,037	...	2,037	2,037
Total ...	91,541	18,934	1,10,475	1,03,900
(2.)—*Main Canals and Branches.*				
B. Land	1,576	...	1,576	1,522
D. Regulators	9,938	...	9,938	9,938
E. Falls and weirs	3,567	...	3,567	3,568
F (1.) Other Cross Drainage Works	2,849	9,317	12,166	18,715
G. Bridges	8,960	2,853	11,813	12,301
H. Escapes	682	...	682	682
L. Earthwork	96,580	...	96,580	96,580
Total ...	1,24,152	12,170	1,36,322	1,43,306
(3.)—*Distributaries.*				
C. Works	9,391	111	9,502	9,628
L. Earthwork	9,373	...	9,373	9,372
N. Tanks and Reservoirs	1,650	...	1,650	27,145
O. Miscellaneous	3	...	3	...
Total ...	20,417	111	20,528	40,145
Total, Works ...	2,36,110	31,215	2,67,325	2,93,351
II.—ESTABLISHMENT	51,560	9,168	60,728	68,174
III.—TOOLS AND PLANT	3,390	781	4,171	4,063
IV.—SUSPENSE ACCOUNTS	...	...	...	...
Grand Total ...	2,91,060	41,164	3,32,224	3,65,588
V.—LESS RECEIPTS ON CAPITAL ACCOUNT ...	798	...	798	...
Net Total ...	2,90,262	41,164	3,31,426.	(a) 3,65,588

(a) For details *vide* Statement No. 6.

MADRAS,
19th October 1882.

(Signed) G. BROWN,
for Examiner, Public Works Accounts.

IRRIGATION BRANCH.

PUBLIC WORKS

ADMINISTRATIVE ACCOUNTS

PELANDORAI

No. 3.—Revenue Account for

Receipts.	Total. Previous.	Total. 1881-82.	Total. Total.
	Rs.	Rs.	Rs.
Receipts from plantations	111	...	111
Miscellaneous and other receipts	114	...	114
Total Revenue realized in the Public Works Department	225	...	225
Direct Revenue realized in the Civil Department	19,276	−12	19,264
Total, Direct Revenue ...	19,501	−12	19,489
Share of Land Revenue collected in the Civil Department	361	65	426
Add old maintenance charges saved to Government	930	155	1,085
Excess Expenditure (Deficit)	86,485	66,892	1,53,377
Total, Receipts ...	1,07,277	67,100	1,74,377

MADRAS,
19th October 1882.

DEPARTMENT.

FOR THE YEAR 1881-82.

ANICUT SYSTEM.

and to end of 1881-82.

Charges.	Total. Previous.	Total. 1881-82.	Total. Total.
	Rs.	Rs.	Rs.
(IA.)—EXTENSIONS AND IMPROVEMENTS.			
(1.)—*Head Works*—			
C. Works	1,971	...	1,971
K. Buildings	56	131	187
(2.)—*Main Canals and Branches*—			
D. Regulators	38	28	66
(3.)—*Distributaries*—			
C. Works	32	...	32
N. Tanks and reservoirs	...	272	272
Total ...	2,097	431	2,528
(IB.)—MAINTENANCE AND REPAIRS.			
(1.)—*Head Works*—			
C. Works	39,847	28,858	68,705
K. Buildings	82	582	664
(2.)—*Main Canals and Branches*—			
C. Works	—185	313	128
K. Buildings	24	...	24
L. Earthwork	28,485	2,270	30,755
N. Tanks and reservoirs	117	879	996
O. Miscellaneous	...	14,359	14,359
(3.)—*Distributaries*—			
N. Tanks and reservoirs	...	110	110
Total ...	68,370	47,371	1,15,741
Total Extensions and Improvements and Maintenance and Repairs	70,467	47,802	1,18,269
(II.)—ESTABLISHMENT	27,766	14,926	42,692
(III.)—TOOLS AND PLANT	1,730	1,196	2,926
(IV.)—REFUNDS OF REVENUE	...	...	...
Total ...	99,963	63,924	1,63,887
Share of Collection Charges in the Civil Department	1,414	4	1,418
Total, Direct Charges ...	1,01,377	63,928	1,65,305
Indirect Charges	5,900	3,172	9,072
Total, Direct and Indirect Charges ...	1,07,277	67,100	1,74,377
Balance, Net Revenue ...	...	...	...
Grand Total ...	1,07,277	67,100	1,74,377

(Signed) G. BROWN,
for Examiner, Public Works Accounts.

PUBLIC WORKS DEPARTMENT.

ADMINISTRATIVE ACCOUNTS FOR THE YEAR 1881-82.

PELANDORAI ANICUT SYSTEM.

No. 4.—Interest Account for and to end of 1881-82.

	Amount.		Amount.
	Rs.		Rs.
Total Interest Charges to end of 1880-81	73,072	Net Revenue realized to end of 1880-81—Loss	− 86,485
Total Interest Charges for the year 1881-82	12,434	Net Revenue realized during 1881-82—Loss	− 66,892
		Balance Net Interest charges ...	2,38,883
Total ...	85,506	Total ...	85,506

MADRAS,
19th October 1882.

(Signed) G. BROWN,
for Examiner, Public Works Accounts.

PUBLIC WORKS DEPARTMENT.

ADMINISTRATIVE ACCOUNTS FOR THE YEAR 1881-82.

PELANDORAI ANICUT SYSTEM.

No. 5.—Account of Indirect Charges for and to end of 1881-82.

Particulars.	Previous.	1881-82.	Total.
	Rs.	Rs.	Rs.
CAPITAL—			
Capitalization of abatement of Land Revenue	20,004	...	20,004
Leave and Pension Allowances ...	10,956	1,948	12,904
Total ...	30,960	1,948	32,908
REVENUE—			
Leave and Pension Allowances ...	5,900	3,172	9,072
Total ...	5,900	3,172	9,072
Grand Total ...	36,860	5,120	41,980

MADRAS,
19th October 1882.

(Signed) G. BROWN,
for Examiner, Public Works Accounts.

PUBLIC WORKS DEPARTMENT.

ADMINISTRATIVE ACCOUNTS FOR THE YEAR 1881-82.

PELANDORAI ANICUT SYSTEM.

No. 6.—Statement comparing Charges to date with sanctioned Estimate.

Particulars.	Charges against old Sanctions that have expired.	Current Sanctions.			Total Charges to date against old and current Sanctions	Remarks.
		Charges to end of 1881-82.	Amount of Sanctioned Estimate.	Unspent Balance of Estimate.		
1	2	3	4	5	6	7
Direct Charges.	Rs.	Rs.	Rs.	Rs.	Rs.	
Works ...	...	2,67,325	2,93,351	26,026	2,67,325	
Establishment ...	...	60,728	68,174	7,446	60,728	
Tools and Plant...	...	4,171	4,063	− 108	4,171	Estimate sanctioned in Government of India Register No. 38 I. of 1877-78 .. 3,33,518
Total ...	...	3,32,224	3,65,588	33,364	3,32,224	
Less—Receipts on Capital Account.	...	798	...	798	798	Do. do. in No. 1 I. of 1881-82 29,250
Net Total ...	...	3,31,426	3,65,588	34,162	3,31,426	Additional amount sanctioned by the Madras Government in G.O. No. 642 I., dated 16th August 1878 .. 2,820
Indirect Charges.						Total .. 3,65,588
Capitalized abatement of Land Revenue.	...	20,004	(*a*) 21,559	1,555	20,004	
Leave and Pension Allowances.	...	12,904	(*a*) 15,496	2,592	12,904	(*a*) *Vide* comparative statement printed in G.O., No. 267 I., dated 30th August 1877
Total ...	...	32,908	37,055	4,147	32,908	
Interest on direct outlay while work is under construction.	...	29,004	(*a*) 60,000	30,996	29,004	
Grand Total ...	...	3,93,338	4,62,643	69,305	3,93,338	

MADRAS,
19th October 1882.

(Signed) G. BROWN,
for Examiner, Public Works Accounts.

PUBLIC WORKS DEPARTMENT.

ADMINISTRATIVE ACCOUNTS FOR THE YEAR 1881-82

BUCKINGHAM CANAL.

No. 2.—Capital Account for and to end of 1881-82.

Heads of Account.	Direct Charges.			Estimated Cost of Construction.
	Previous.	1881-82.	Total.	
	Rs.	Rs.	Rs.	Rs.
(I.)—WORKS	(a)	1,02,618	(a)	(b)
Total, Works ...	...	1,02,618	...	...
(II.)—ESTABLISHMENT	...	28,856	...	...
(III.)—TOOLS AND PLANT	...	2,740	...	...
(IV.)—SUSPENSE ACCOUNTS	...	...	...	...
Grand Total ...	...	1,34,214	...	...
(V.)—LESS RECEIPTS ON CAPITAL ACCOUNT...	...	...	...	...
Net Total ...	...	1,34,214	...	...

(a) The Capital and Revenue Accounts not having been prepared for this system, these columns have therefore been left blank.

(b) The Estimates have not yet been finally made out.

MADRAS,
19th October 1882.

(Signed) G. BROWN,
for Examiner, Public Works Accounts.

PUBLIC WORKS

ADMINISTRATIVE ACCOUNTS

BUCKINGHAM

No. 3.—Revenue Account for

Receipts.	Total. Previous.	Total. 1881-82.	Total. Total.
	Rs. (a)	Rs.	Rs. (a)
Receipts from other canal produce	...	3,889	...
Navigation Receipts	...	1,21,696	...
Rent of Buildings	...	70	...
Fines	...	756	...
Miscellaneous and other receipts	...	85	...
Total, Direct Receipts realized in the Public Works Department ...	...	1,26,496	...
Total, Receipts ...	...	1,26,496	...

MADRAS,
19th October 1882.

(a) Information is not yet

MADRAS PRESIDENCY

DEPARTMENT.

FOR THE YEAR 1881-82.

CANAL.

and to end of 1881-82.

Charges.	Total. Previous.	Total. 1881-82.	Total. Total.
	Rs. (a)	Rs.	Rs. (a)
(IA.)—Extensions and Improvements	...	2,845	...
Total ...	...	2,845	...
(IB.)—Maintenance and Repairs	...	81,503	...
Total ...	...	81,503	...
Total, Extensions and Improvements and Maintenance and Repairs ...	...	84,348	...
(II.)—Establishment	...	22,549	...
(III.)—Tools and Plant	...	7,935	...
(IV.)—Refunds of Revenue	...	2,598	...
Total ...	...	1,17,430	...
Share of Collection Charges in the Civil Department.	...	...	...
Total, Direct Charges ...	...	1,17,430	...
Indirect Charges	...	...	...
Total, Direct and Indirect Charges ...	...	1,17,430	...
Balance, Net Revenue ...	...	9,066	...
Grand Total ...	...	1,26,496	...

available for previous years.

(Signed) G. BROWN,
for Examiner, Public Works Accounts.

PUBLIC WORKS DEPARTMENT.

ADMINISTRATIVE ACCOUNTS FOR THE YEAR 1881-82.

BUCKINGHAM CANAL.

No. 4.—Interest Account for and to end of 1881-82.

	Amount.		Amount.
	Rs.		Rs.
	(a)		(a)
Total Interest Charges to end of 1880-81	...	Net Revenue realized to end of 1880-81	...
Total Interest Charges for the year 1881-82	...	Net Revenue realized during 1881-82	...
		Balance Net Interest Charges ...	...
Total ...	...	Total ...	...

(a) *Vide* remarks in Statement Nos. 2 and 3.

MADRAS,
19th October 1882.

(Signed) G. BROWN,
for Examiner, Public Works Accounts.

PUBLIC WORKS DEPARTMENT.

ADMINISTRATIVE ACCOUNTS FOR THE YEAR 1881-82.

BUCKINGHAM CANAL.

No. 5.—Account of Indirect Charges for and to end of 1881-82.

Particulars.	Previous.	1881-82.	Total.
	Rs.	Rs.	Rs.
	(a)	(a)	(a)
CAPITAL	...	...	...
REVENUE	...	...	...
Grand Total ...	...	...	...

(a) These charges have not yet been calculated, pending the preparation of final Capital and Revenue Accounts.

MADRAS,
19th October 1882.

(Signed) G. BROWN,
for Examiner, Public Works Accounts.

PUBLIC WORKS DEPARTMENT.

ADMINISTRATIVE ACCOUNTS FOR THE YEAR 1881-82.

BUCKINGHAM CANAL.

No. 6.—Statement comparing Charges to date with sanctioned Estimate.

Particulars.	Charges against old Sanctions that have expired.	Current Sanctions.			Total Charges to date against old and current Sanctions.	Remarks.
		Charges to end of 1881-82.	Amount of Sanctioned Estimate.	Unspent balance of Estimate.		
1	2	3	4	5	6	7
	Rs.	Rs.	Rs.	Rs.	Rs.	
Nil.						

Vide remarks in Statement No. 2.

MADRAS,
19th October 1882.

(Signed) G. BROWN,
for Examiner, Public Works Accounts.

GOVERNMENT OF MADRAS.

PUBLIC WORKS DEPARTMENT.

Irrigation.

Account.

No. 58.

READ—the following papers :—

From D. C. GORDON, Esq., Examiner of Public Works Accounts, to the Chief Engineer for Irrigation, dated Madras, 18th September 1882, No. 33 E.I.

I have the honor to bring to your notice that in a work voucher received from the Executive Engineer, Sangum Project Division, for the construction of temporary buildings in that division (the revised estimate for which was sanctioned in G.O., No. 471 I., of 15th June 1882, for Rs. 25,185,) two items appear in the columns " as per estimate " which I do do not think are correct—

They are (1) " Reserve for repairs " Rs. 2,005, and
(2) " Reserve for extra buildings " Rs. 1,432.

2. The sanction for the construction of the temporary buildings falls under the sub-head of classification " K. Buildings," while that for " Repairs " falls under sub-head " P. Maintenance," *vide* Appendix I, Part II, paragraph 30; it is obvious therefore that a separate sanction should be obtained under the latter sub-head for Item No. 1. The second item provides for work that is undefined and should not therefore have been included in the estimate submitted for sanction. If extra buildings were found necessary hereafter they should be provided for in supplementary estimates.

3. I have therefore the honor to request that you will take the necessary steps for having the sanction conveyed in G.O. referred to in paragraph 1 above modified on an early date.

No. 58-A. To the Examiner of Public Works Accounts, dated Madras, 21st September 1882, No. 132 C.

No. 58-B. From D. C. GORDON, Esq., Examiner of Public Works Accounts, to the Chief Engineer for Irrigation, dated Madras, 13th October 1882, No. 37 E.I.

With reference to paragraph 2 of your letter No. 132 C. of the 21st ultimo, I have the honor to state that there does not appear to be any necessity for obtaining the sanction of the Government of India for additional buildings that may hereafter be required so long as the amount provided for the construction of temporary buildings in the original scheme is not exceeded, estimates for such additional buildings being submitted to the Local Government for sanction. Should you see no objection to this I request that steps may be taken to have the sanction accorded in G.O., No. 471 I., dated 15th June 1882, modified at an early date.

No. 58-C. To the Examiner of Public Works Accounts, dated 19th October 1882, No. 141 C.

No. 58-D. From D. C. GORDON, Esq., Examiner of Public Works Accounts, to the Chief Engineer for Irrigation, dated Madras, 7th November 1882, No. 39 E.I.

With reference to your letter No. 141 C., dated 19th October 1882, I have the honor to observe that the mere fact of omitting the item of Rs. 1,432 from the estimate does not indicate that the amount has been surrendered. An estimate for Rs. 21,748 has been sanctioned out of the sum of Rs. 25,185 provided in the total scheme, the difference * being available for extra buildings that may be found necessary hereafter and for future repairs.

		RS.
* Reserve under K. Buildings	...	1,432
Do. do. P. Maintenance	...	2,005
		3,437

2. As regards the total amount of the estimate for the project being worked up to, as redistributed in the Proceedings of the Madras Government, No. 748 I., of the 21st September 1882, I may remark that this redistribution can only be worked up to when *detailed* sanctions are accorded up to the *full* amount provided. The provision of a lump sum in the detailed sanction is not in accordance with Chief Engineer's (Public Works Department) Circular No. 392 E., dated 11th July 1882.

3. As an instance of the risk incurred by the insertion of the lump sum in a detailed estimate, I beg to invite your attention to this office letter No. 36 E.I., dated 2nd October 1882, bringing to your notice that certain outlay was incurred against the provision made for 'unforeseen works' in the estimate for Penugundapuram project, and to point out that the entry of the sum of Rs. 1,432 in the estimate under reference may likewise lead to outlay being incurred in the absence of sanctioned detailed estimates.

4. Under the circumstances now explained I trust you will agree with me as to the necessity for modifying your sanction.

No. 59.

ORDER—dated 24th November 1882, No. 940 I., Public Works.

The amount of the estimate for temporary buildings included in the revised estimate for (1) head works of the Sangum Anicut Project, sanctioned in G.O., No. 471 I., dated 15th June 1882, will be reduced from Rs. 25,185 to Rs. 21,748. A sum of Rs. 1,432 will be reserved for extra buildings, which may be required in future, and will be entered as a separate item, under K. Buildings. Rs. 2,000 will be entered under P. Maintenance.

(True Extract.)

(Signed) J. O. HASTED, Colonel, R.E.,
Ag. Joint Secy. to Govt., P.W.D.,
Irrigation Branch.

To the Superintending Engineer, Second Circle.
" Chief Engineer for Irrigation.
" Examiner, Public Works Accounts.
" Revenue Department.
" Board of Revenue.

IRRIGATION.
ACCOUNT.

Govt. of (1882) Madras.

PUBLIC WORKS.

Dated November, 24th.

Recd. *Encl.*

G.O., 24th Nov. 1882, No. 940 I.

NOVEMBER.
Nos. 58-59.

Sangum Project—Temporary Buildings.

The amount of the estimate for — ordered to be reduced, and a sum of Rs. 1,432 reserved for extra buildings that may hereafter be required.

GOVERNMENT OF MADRAS.

PUBLIC WORKS DEPARTMENT.

Irrigation.
Account.

No. 60.

READ—the following paper :—

No. 631.

Office Note from the Examiner of Public Works Accounts.

The statements of financial results prescribed in Government of India Circular No. XXIII of 1881 are herewith forwarded for your countersignature and submission to the Government of India through the Local Government.

2. The delay is due to the late communication of the results of revenue for Fasli 1291 in the following Government Orders, the last of which was received in this office on the 24th instant :—

G.O.,	No.	659 I.,	dated	23rd August	1882.
,,	,,	680 I.,	,,	30th ,,	,,
,,	,,	741 I.,	,,	18th September	,,
,,	,,	765 I.,	,,	27th ,,	,,
,,	,,	768 I.,	,,	28th ,,	,,
,,	,,	774 I.,	,,	2nd October	,,
,,	,,	822 I.,	,,	16th ,,	,,

MADRAS,
31st October 1882.

(Signed) D. C. GORDON,
Examiner, Public Works Accounts.

No. 121 I.

Endorsement on the above.

Submitted to Government.

2. The amounts of revenue entered in these statements have been taken from the Revenue Accounts prepared by Mr. Wilson, who has completed the accounts for all the systems except the Cauvery Delta, for which the accounts, to the end of 1880-81, are still under preparation. For this system the approximate figures to the end of 1880-81 furnished by the Board of Revenue have been adopted.

3. The results arrived at by comparing the capitalized value of net revenue of the works with the total sum at charge against them are as shown below :—

	Capitalized Value of Net Revenue more than the Total Sum at Charge.	Capitalized Value of Net Revenue less than the Total Sum at Charge.
	£	£
Productive Public Works—		
Godávari Delta	3,886,480	...
Kistna do.	1,751,790	...
Cauvery do.	3,487,396	...
Pennér Anicut	85,127	...
Srívaikuntham Anicut	...	54,771
Total ...	9,210,733	54,771
Ordinary Irrigation Works—		
Chembrambakam Tank	14,478	...
Pálár Anicut	...	66,044
Pelandorai Anicut	...	229,350
Total ...	14,478	295,394

4. Irrigation under the Srívaikuntham, the Pálár, and the Pelandorai Anicut Systems has not yet been fully developed, the works being still incomplete.

SUNKESALA, (Signed) J. O. HASTED, Colonel, R.E.,
16th November 1882. Ag. Chief Engr. for Irrigation.

To the Acting Joint Secretary to Government, Public Works Department, Irrigation Branch.

No. 61.

ORDER—dated 24th November 1882, No. 941 I., Public Works.

Ordered that a copy of these Proceedings together with copies of Financial Statements be forwarded to the Government of India with reference to their Circular No. XXIII of 1881.

(Here enter No. 942 I., dated 24th November 1882.)

(True Extract.)

(Signed) J. O. HASTED, Colonel, R.E.,
Ag. Joint Secy. to Govt., P.W.D.,
Irrigation Branch.

To Superintending Engineers.
,, the Chief Engineer for Irrigation.
,, the Examiner of Public Works Accounts.
,, the Revenue Department.
,, the Board of Revenue.
,, W. Wilson, Esq.

No. 62.

ENDORSEMENT—dated 24th November 1882, No. 942 I., Public Works.

Forwarded.

(Signed) J. O. HASTED, Colonel, R.E.,
Ag. Joint Secy. to Govt., P.W.D.,
Irrigation Branch.

IRRIGATION.
ACCOUNT.

Govt. of {1882} Madras.

PUBLIC WORKS.

Dated November, 24th.

Recd. *Encl.*

G.O., 24th Nov. 1882, No. 942 I.

NOVEMBER.

Nos. 60—62.

Financial Results of Irrigation Works.

STATEMENT showing the — for 1881-82.

STATEMENTS showing the Financial Results of Irrigation Works in India for and up to end of 1881-82.

(*N.B.*—All sums of money are stated in sterling converted at two shillings the rupee.)

Table No. I.—Principal Results of Operations for the year ended 31st March 1882.

Irrigation Works.	Mileage in Operation. — Main Canal.	Mileage in Operation. — Distribution.	Direct Capital Outlay during year 1881-82 (including Cost of Establishment and Tools and Plant).	Gross Receipts, Direct and Indirect, from all sources.	Working Expenses.	Net Revenue (excluding Charges for Interest).	Interest (at 4 per Cent. on Direct Capital Outlay at commencement of year and at 2 per Cent. on Outlay during year).	Surplus Revenue after paying Interest on Direct Capital Outlay. — Amount.	Surplus Revenue after paying Interest on Direct Capital Outlay. — Percentage on Total *Sum* at Charge.	Excess Charge including Interest on Direct Capital Outlay. — Amount.	Excess Charge including Interest on Direct Capital Outlay. — Percentage on Total *Sum* at Charge.	Area of Land irrigated during the year.	Gross Receipts per Acre irrigated.	Working Expenses (excluding Interest) per Acre irrigated.	Percentage of Working Expenses on Receipts.
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
MADRAS PRESIDENCY.	MS. CHS.	MS. CHS.	£	£	£	£	£	£		£		ACRES.	£ s. d.	£ s. d.	
Productive Public Works.															
Godávari Delta System ..	508 78	2,693 42	9,916	179,253	44,184	135,069	35,881	99,188	(*a*)	..	..	549,998	0 6 6	0 1 7	24·65
Kistna do. ..	344 2	1,791 7	11,474	104,376	33,065	71,311	22,466	48,845	157 64	..	..	287,074	0 7 3	0 2 4	31·67
Cauvery do. ..	269 44	242 46	..	87,576	19,120	68,456	4,069	64,387	(*a*)	..	..	1,005,797	0 1 9	0 0 4	21·83
Pennér Anicut System ..	15 2	133 74	..	14,143	4,928	9,215	5,715	3,500	2·41	..	..	57,865	0 4 11	0 1 8	34·84
Srívaikuntham Anicut System.	28 7	149 48	106	7,299	2,799	4,500	4,896	..	..	396	·24	34,450	0 4 3	0 1 7	38·35
Sangam Project (*b*) ..	..	..	18,018	..	..	..	..	..	..	..	..	..	..	..	..
Total ..	..	..	39,514	392,647	104,096	288,551	73,027	215,920	..	396	..	..	..	..	..
Ordinary Irrigation Works.															
Chembrambakam Tank ..	..	..	1,172	4,362	802	3,560	2,476	1,084	1·45	..	..	17,919	0 4 10	0 0 11	18·39
Pálár Anicut System ..	96 40	127 27	2,924	11,083	3,980	7,103	6,869	234	·09	..	..	92,781	0 2 5	0 0 10	35·91
Pelandorai Anicut System ..	15 33	22 45½	4,116	21	6,710	−6,689	1,243	..	..	7,932	12·77	2,186	0 0 2	3 1 5	3,1952·38
Total ..	..	..	8,212	15,466	11,492	3,974	10,588	1,318	..	7,932	..	..	..	..	..
Protective Public Works (*c*) ..	..	..	5,983	..	..	..	..	..	..	..	..	..	..	..	..

(*a*) No percentages can be shown here, the total sum at charge shown in Column 8 of Table II resulting in a *minus* entry.
(*b*) This systems is under construction. (*c*) These projects are not matured yet.

MADRAS,
31st October 1882.

(Signed) D. C. GORDON,
Examiner, Public Works Accounts.

(Signed) J. O. HASTED, Col., R.E.,
Ag. Joint Secy. to Govt., P.W.D.,
Irrigation Branch.

STATEMENTS showing the Financial Results of Irrigation Works in India for and up to end of 1881-82.

(*N.B.*—All sums of money are stated in sterling converted at two shillings the rupee.)

Table III.—Main Heads of Revenue and Working Expenses for the year ended 31st March 1882.

Irrigation Works.	REVENUE.								WORKING EXPENSES.													
	IRRIGATION.								REVENUE MANAGEMENT.						MAINTENANCE OF WORKS.							
									Establishment Charges.						Establishment Charges.							
	Water-rates directly paid.	Share of Land Revenue.	Total.	Navigation.	Plantations and Lands.	Water-power.	Miscellaneous.	Total.	Direction.	Execution.	Navigation.	Civil Officers.	Remission of Revenue.	Total R.	Direction.	Execution.	Medical.	Total.	Works, Tools and Plant.	Indirect Charges.	Total M.	Grand Total, R. and M.
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23
MADRAS PRESIDENCY.	£	£	£	£	£	£	£	£	£	£	£	£	£	£	£	£	£	£	£	£	£	£
Productive Public Works.																						
Godávari Delta System ..	153,371	15,887	169,258	6,212	65	..	3,718	179,253	..	2,773	2,099	12,187	99	17,158	1,019	4,132	..	5,151	19,587	2,288	27,026	44,184
Kistna do. ..	87,565	12,856	100,421	3,198	58	..	699	104,376	..	1,668	853	7,230	1	9,752	870	3,800	..	4,670	17,115	1,528	23,313	33,065
Cauvery do. ..	58,846	(a)27,634	86,480	..	568	..	528	87,576	..	830	16	5,216	1	6,063	1,304	2,143	..	3,447	8,698	912	13,057	19,120
Pennér Anicut System ..	10,246	(a)3,871	14,117	..	..	..	26	14,143	..	471	..	850	..	1,321	149	666	..	815	2,519	273	3,607	4,928
Srívaikuntham do. ..	6,265	(a)930	7,195	..	14	..	90	7,299	..	211	..	465	12	688	78	371	..	449	1,522	140	2,111	2,799
Total ..	316,293	61,178	377,471	9,410	705	..	5,061	392,647	..	5,953	2,968	25,948	113	34,982	3,420	11,112	..	14,532	49,441	5,141	69,114	104,096
Ordinary Irrigation Works.																						
Chembrambakam Tank ..	3,589	(a)772	4,361	..	..	..	1	4,362	..	78	..	263	..	341	22	79	..	101	324	36	461	802
Pálár Anicut System ..	9,269	(a)1,789	11,058	..	6	..	19	11,083	..	281	..	766	..	1,047	130	509	..	639	2,098	196	2,933	3,980
Pelandorai do. ..	−1	(a)22	21	..	..	..	..	21	..	94	..	1	..	95	191	1,207	..	1,398	4,900	317	6,615	6,710
Total ..	12,857	2,583	15,440	..	6	..	20	15,466	..	453	..	1,030	..	1,483	343	1,795	..	2,138	7,322	549	10,009	11,492
Protective Public Works ..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..

(a) Includes old maintenance charges saved to Government.

MADRAS,
31st October 1882.

(Signed) D. C. GORDON,
Examiner, Public Works Accounts.

(Signed) J. O. HASTED, Col., R.E.,
Ag. Joint Secy. to Govt., P.W.D.,
Irrigation Branch.

STATEMENTS showing the Financial Results of Irrigation Works in India for and up to end of 1881-82.

(*N.B.*—All sums of money are stated in sterling converted at two shillings the rupee.)

Table No. II.—General Financial Results of the several undertakings to 31st March 1882.

Irrigation Works.	Estimated Cost of Construction including Indirect Charges.	Date of Completion of Anicut.	Capital Outlay including Cost of Establishment and Tools and Plant. At commencement of 1881-82.	Capital Outlay including Cost of Establishment and Tools and Plant. At close of 1881-82.	Capitalized Value of Land Revenue on Land occupied by Canal, Leave and Pension Allowances.	Excess of Interest over Net Revenue in past years.	Total Sum at Charge against the Work at end of 1881-82.	Interest at 4 per Cent. on Sum at Charge at end of 1881-82.	Surplus for the year of Net Revenue over Interest on Total Sum at Charge.	Excess for the year of Interest on Total Sum at Charge over Net Revenue.	Capitalized Value at 4 per Cent. of Net Revenue (excluding Charges for Interest.)	Surplus Sum to Credit in excess of Total Sum at Charge against the Works.	Excess Sum at Charge over Capitalized Value of Net Revenue.
1	2	3	4	5	6	7	8	9	10	11	12	13	14
MADRAS PRESIDENCY.	£		£	£	£	£	£	£	£	£	£	£	£
Productive Public Works.													
Godávari Delta System ..	1,303,265	1846-47	892,078	901,994	177,539	−15,89,288	− 509,755	−20,390	155,459	..	3,376,725	3,886,480	..
Kistna do. ..	1,667,081	1855-56	555,908	567,382	44,396	− 580,793	30,985	1,239	70,072	..	1,782,775	1,751,790	..
Cauvery do. ..	183,357	1836-37	101,717	101,717	10,210	−1,887,923	−1,775,996	−71,039	139,495	..	1,711,400	3,487,396	..
Pennér Anicut System ..	125,921	1860-61	142,886	142,886	23,630	− 21,268	145,248	5,810	3,405	..	230,375	85,127	..
Srívaikuntham do. ..	117,153	1870-71	122,339	122,445	7,370	37,456	167,271	6,691	..	2,191	112,500	..	54,771
Sangam Project (*b*)	356,905	..	5,113	23,131	577	..	..	..	..	..	..	..	..
Total ..	3,753,682	..	1,820,041	1,859,555	263,722	−4,041,816	−1,942,247	−77,689	368,431	2,191	7,213,775	9,210,793	54,771
Ordinary Irrigation Works.													
Chembrambakam Tank ..	73,696	1870-71	61,301	62,474	11,206	842	74,522	2,981	579	..	89,000	14,478	..
Pálár Anicut System	(*a*) ..	1853-54	170,259	173,183	9,199	61,237	243,619	9,745	..	2,642	177,575	..	66,044
Pelandorai do.	46,264	1875-76	29,026	33,143	3,291	25,691	62,125	2,485	..	9,174	−167,225	..	229,350
Total ..	119,960	..	260,586	268,800	23,696	87,770	380,266	15,211	579	11,816	99,350	14,478	295,394
Productive Public Works (*c*) ..	..	..	..	5,983	..	..	..	..	..	..	..	..	..

(*a*) The completion estimate for this system is under preparation in the Chief Engineer's (for Irrigation) Office.
(*b*) *Vide* foot-note (*b*) in Table No. I.
(*c*) Do. (*c*) do.

MADRAS,
31st October 1882.

(Signed) D. C. GORDON,
Examiner, Public Works Accounts.

(Signed) J. O. HASTED, Col., R.E.,
Ag. Joint Secy. to Govt., P.W.D.,
Irrigation Branch.

GOVERNMENT OF MADRAS.

PUBLIC WORKS DEPARTMENT.

Irrigation.
Account.

No. 63.

Read—the following letter from J. W. Rundall, Esq., Superintending Engineer, Second Circle, to the Chief Engineer for Irrigation, dated Camp, Bezváda, 16th October 1882, No. 1308 K.S. :—

One Statement.
,, Abstract.
,, Estimate.

I have the honor to forward herewith the floating plant statement for 1883-84, together with one special repair estimate amounting to Rs. 730.

2. The Executive Engineer has prepared an estimate for the repair of punts 29 and 30, but at the same time states that only punt No. 30 is worth spending this amount upon.

3. The dredges, iron and wooden punts, have been revalued under G.O., No. 35 I. of the 12th January 1881.

4. Range Boat No. 5 has been struck out from the return, as it was sold under G.O., No. 639 I. of the 1st October 1880.

STATEMENT of the Floating Plant in Kistna District showing the Nature of Employment,

Register Number.	Detail of Plant.			Measurement of Plant.						Engines.	
	Description.	Name of Boat.	Date of Construction.	Hull over all. Length.	Hull over all. Breadth.	Hull over all. Depth.	Extra width for Paddle Box.	When loaded. Draft.	When loaded. Tons carried.	Number of horse-power.	Description.
1	2	3	4	5	6	7	8	9	10	11	12
..	Steamer ..	*Charles Orr* ..	Received from Calcutta in 1879-80.	60 0	9 0	5 0	..	3 3	..	12	High p sure, tical.
1	Dredge ..	..	1858-59	50 0	8 0	3 10	..	2 4	..	6	High p sure, h zontal
2	Do. ..	..	1858-59	50 0	10 0	3 10	..	2 0	..	6	Do.
3	Do. ..	..	1859-60	90 0	14 6	3 10	..	1 9	..	8	High p sure, os lating.
5	Do. ..	..	1866-67, transferred from Godávari.	90 0	14 6	3 10	..	1 11	..	8	Do.
9	Do. ..	..	1872-73, transferred from Godávari.	90 0	14 6	3 10	..	1 9	..	8	Do.
1	Iron punt ..	..	1859-60	60 0	10 0	2 10	..	2 6	16 10	..	..
2	Do. ..	..	1859-60	60 0	10 0	2 10	..	2 6	16 10	..	..
4	Do. ..	..	1859-60	60 0	10 0	2 10	..	2 6	16 10	..	..
5	Do. ..	..	1859-60	60 0	10 0	2 10	..	2 6	16 10	..	..
6	Do. ..	..	1859-60	60 0	10 0	2 10	..	2 6	16 10	..	..
8	Do. ..	..	1861-62	60 0	10 0	2 10	..	2 6	16 10	..	..
9	Do. ..	..	1861-62	60 0	10 0	2 10	..	2 6	16 10	..	..
11	Do. ..	..	1861-62	60 0	10 0	2 10	..	2 6	16 10	..	..
12	Do. ..	..	1867-68	60 0	10 0	2 10	..	2 6	16 10	..	..
16	Do. ..	..	1867-68	60 0	10 0	2 10	..	2 6	16 10	..	..
17	Do. ..	..	1862-63	44 0	12 0	3 9	..	2 6	16 10	..	..
18	Do. ..	..	1864-65	44 0	12 0	3 9	..	2 6	16 10	..	..
19	Do. ..	..	1864-65	44 0	12 0	3 9	..	2 6	16 10	..	..
20	Do. ..	..	1871-72	62 0	10 0	2 10	..	2 0	16 10	..	..
21	Do. ..	..	1870-71	40 6	7 6	2 2	..	1 11	8 10	..	..
22	Do. ..	..	1871-72	40 6	7 6	2 2	..	1 11	8 10	..	..
23	Do. ..	..	1872-73	40 6	7 6	2 2	..	1 11	8 10	..	..
24	Do. ..	..	1873-74	40 6	7 6	2 2	..	1 11	8 10	..	..
26	Do. ..	..	1874-75	40 6	7 6	2 2	..	1 11	8 10	..	..
27	Do. ..	..	1874-75	40 6	7 6	2 2	..	1 11	8 10	..	..
28	Do. ..	..	1875-76	40 6	7 6	2 2	..	1 11	8 10	..	..
29	Do. ..	..	1872-73	39 9	11 3	2 10	..	1 7	16 0	..	..
30	Do. ..	..	1872-73, received from Godávari.	39 9	11 3	2 10	..	1 7	16 0	..	..
31	Do. ..	..	Do. do. ..	35 0	8 3	2 11	..	1 11	14 0	..	..
32	Do. ..	..	Do. do. ..	39 6	12 0	3 0	..	1 6	16 0	..	..
33	Wooden punt with iron ribs, composite.	..	1876-77	60 0	13 0	3 6	..	2 6	22 10	..	..
34	Do. ..	..	1876-77	60 0	13 0	3 6	..	2 6	22 10	..	..
35	Do. ..	..	1876-77	72 0	13 0	3 6	..	2 6	27 0	..	..

Cost of Upkeep, and the Fund or Estimate from which to be maintained during 1883-84.

Machinery, &c.				Average speed in Miles per Hour.	Value of Plant.		Cost of Annual Upkeep as per Details appended.	Employment during 1883-84.				Special Repairs.	Remarks.
Boilers.		Propellers.											
Pressure.	Description.	Description.	Revolution.		Original.	Present Book value.		District.	Locality.	Work.	Fund.		Present Condition and how to be disposed of if irreparable.
13	14	15	16	17	18	19	20	21	22	23	24	25	26
					RS.	RS.	RS.					RS.	
80	Tabular horizon-tal.	Twin screw.	160	About 8	8,242	4,161	600	Kistna.	Bezváda River.	Towing punt.	Imperial Irrigation.	..	In good order.
				Special ..	80								
					8,322	..	..						
50	Do.	..	..	..	15,614	10,000	325		Ellore, Masulipatam, Nizampatam, and Commamur Canals and Locks.	Dredging.		..	Do.
50	Do.	..	..	..	15,614	10,000	325					..	Do.
50	Do.	..	..	..	28,357	15,000	460					..	In fair order.
50	Do.	..	..	..	30,437	16,000	460					..	Do.
50	Do.	..	..	..	23,000	14,000	460					..	Under repair.
					1,13,022	65,000	2,030						
..	..	..	..	3 down. 1 up.	2,186	1,200	150		Eastern and Western Delta Divisions.	Conveying materials for different works.		..	In fair order.
..	..	..	..	..	2,186	..	150					..	Unserviceable.
..	..	..	..	..	2,185	..	150					..	
..	..	..	..	..	2,185	..	150					..	
..	..	..	..	..	2,185	1,000	150					..	In good order.
..	..	..	..	..	2,172	2,000	150					..	Recently put in thorough order.
..	..	..	..	..	2,172	800	150					..	In fair order but old; requires looking after.
..	..	..	..	..	2,172	1,400	150					..	Recently repaired.
..	..	..	..	..	3,951	1,000	150					..	Will last for some years with care.
..	..	..	..	..	2,172	1,200	150					..	An old punt, but still serviceable.
..	..	..	..	..	4,091	800	150					..	Requires extensive repairs.
..	..	..	..	..	2,299	1,000	150					..	An old punt; still serviceable.
..	..	..	..	..	2,299	1,000	150					..	With care will last some years.
..	..	..	..	..	5,916	2,000	150					..	Will last 6 or 8 years; original high value due to ⅜ inch bottom plates.
..	..	..	..	..	1,584	1,200	120					..	Under repair.
..	..	..	..	..	1,524	1,200	120					..	Do.
..	..	..	..	..	1,524	1,200	120					..	Do.
..	..	..	..	..	2,181	500	120					..	Requires repair; at present not worth much.
..	..	..	..	..	1,960	1,500	120					..	Under repair.
..	..	..	..	..	1,960	800	120					..	Requires repair.
..	..	..	..	..	1,960	800	120					..	Do.
..	..	..	..	..	400	100	120					730	Requires entire new bottom; value nominal.
..	..	..	..	..	400	250	120					730	Requires repair and is worth it.
..	..	..	..	..	250	100	120					..	Under repair.
..	..	..	..	..	400	300	120					..	Recently repaired.
					52,314	21,350	3,420						
..	..	..	..	..	2,500	2,000	160					..	In good order.
..	..	..	..	..	2,500	2,000	160					..	Do.
..	..	..	..	..	3,000	2,500	190					..	Do.

Statement of the Floating Plant in Kistna District showing the Nature of Employment, the

Register Number.	Detail of Plant.			Measurement of Plant.						Engines.	
	Description.	Name of Boat.	Date of Construction.	Hull over all.			Extra width for Paddle Box.	When loaded.		Number of Horse-power.	Description.
				Length.	Breadth.	Depth.		Draft.	Tons carried.		
1	2	3	4	5	6	7	8	9	10	11	12
36	Wooden punt with iron ribs, composite.	..	1877-78	72 0	13 0	3 6	..	2 6	27 0	..	..
37	Do. ..	..	1877-78	72 0	13 0	3 6	..	2 6	27 0	..	..
38	Do. ..	..	1877-78	60 0	13 0	3 6	..	2 6	22 10	..	..
39	Do. ..	..	1881-82	60 0	13 0	3 6	..	2 6	22 5	..	..
40	Do. ..	..	1881-82	60 0	13 0	3 6	..	..	..	..	..
41	Small iron punt.	..	Unknown	29 0	6 6	2 3	..	1 6	3 10	..	..
42.	Wooden punt with iron ribs, composite.	..	1881-82	60 0	13 0	3 6	..	..	..	..	..
43	Do. ..	..									
44	Do. ..	..	....	..	..	..	..	..	..	..	..
45	Do. ..	..	....	..	..	..	..	..	..	..	..
46	Trap punt ..	..	1881-82	60 6	10 2	2 9	..	2 0	17 0	..	..
2	Range boat ..	..	1873-74	48 0	8 2	3 0	..	..	..	..	..
8	Do.	..	1876-77	50 3	8 0	1 8½	..	..	..	..	..
9	Do. ..	..	1877-78, purchased from Mr. Leman.	42 0	8 0	3 0	..	..	..	..	..
10	Do. ..	..	1881-82	29 10	7 5	1 9	..	..	..	..	..
11	Do. ..	..	1881-82	50 0	8 0	2 6	..	..	..	..	..
12	Do. ..	..	1881-82	50 0	8 0	2 6	..	..	..	..	..
13.	Do. ..	..	1881-82, purchased from Mr. Sewell.	34 6	7 4	3 0	..	..	..	..	..
1	Wooden mud punt.	..	1869-70 ..	30 0	11 0	3 0	..	2 8	8 0	..	..
2	Do. ..	..	1869-70	29 6	11 0	3 0	..	2 0	8 0	..	..
1	Anicut paddle boat. (*Violet.*)	..	1877-78	36 0	6 0	2 6	..	..	..	..	..

N.B.—1. The present book value for *Charles Orr* is made by adding the cost of subsequent improvements to and subtracting the amount
2. Dredges, iron and wooden punts have been revalued—*vide* G.O., No. 35 I. of 12th January 1881, and that value entered as
3. The amounts entered in column 20 against all the floating plant are those sanctioned in G.O., No. 736 I. of 27th October
4. There is no harbour plant in the district.

26th September 1882.

Cost of Upkeep, and the Fund or Estimate from which to be maintained during 1883-84—*cont.*

Machinery, &c.				Average speed in Miles per Hour.	Value of Plant.		Cost of Annual Upkeep as per Details appended.	Employment during 1883-84.				Special Repairs.	Remarks. Present Condition and how to be disposed of if irreparable.
Boilers.		Propellers.											
Pressure.	Description.	Description.	Revolution.		Original.	Present Book value.		District.	Locality.	Work.	Fund.		
13	14	15	16	17	18	19	20	21	22	23	24	25	26
					RS.	RS.	RS.					RS.	
..	..	..	..	..	3,000	2,500	190	Kistna—*cont.*	Eastern and Western Delta Divisions—*cont.*	Conveying materials for different works—*cont.*	Imperial Irrigation—*cont.*	..	In good order.
..	..	..	..	..	3,000	2,500	190					..	Do.
..	..	..	..	..	2,500	2,000	160					..	Do.
..	..	..	..	..	2,288	1,800	160					..	Do.
..	..	..	..	..	2,287	1,800	160					..	Do.
					21,075	17,100	1,370						
..	..	..	..	2 down. 1½ up.	..	250	30					..	Do.
..	..	..	..	..	2,287	1,800	160						
..	..	..	..	..	..	..	..					..	Under construction.
..	..	..	..	..	..	..	..					..	
..	..	..	..	..	..	..	..					..	
..	..	..	..	..	3,652	3,300	175					..	In good order.
..	..	..	..	..	547	547	100		Bezváda.			..	Will shortly require extensive repairs to hull.
			Special repairs.		..	..	..						
					547	547	..						
..	..	..	..	..	1,880	1,880	150		Masulipatam.			..	In fair order. Hull will shortly require repair.
..	..	..	..	..	600	600	100		Do. ..	Inspection of Officers.		..	Hull lately renewed.
			Special repairs.		710	710	..						
					1,310	1,310	..						
..	..	..	..	..	740	740	70		Duggirala.			..	Recently purchased and put in order.
			Special repairs.		60	60	..						
					800	800	..						
..	..	..	..	..	1,621	1,621	150		Do. ..			..	In good order.
..	..	..	..	..	1,621	1,621	150		Bezváda.			..	Do.
..	..	..	..	..	913	913	80		Do. ..			..	Do.
					8,692	8,692	800						
..	..	..	..	..	675	250	90		Eastern and Western Deltas.	Dredging.		..	In fair order, but old.
..	..	..	..	..	675	250	90					..	Do. do.
					1,350	500	180						
..	..	..	..	..	900	700	90		Bezváda.	Anicut works.		..	In good order.
					..	..	8,855					1,460	

of depreciation at 10 per cent. per annum from the original cost of the plant—*vide* G.O., No. 35 I. of the 12th January 1881.
present book value.
1881, excepting those entered for iron punts Nos. 39, 40 and 42, and trap punt No. 46, and Range boats Nos. 10 and 13.

(Signed) J. W. RUNDALL,
Supg. Engr., Second Circle.

(Signed) J. D. GRANT,
Executive Engineer.

No. 122 I.

Endorsement on the above.

Submitted to Government.

The following abstract compares the particulars of the statement for 1883-84 with those of 1882-83 :—

Description.	Number of each.		Original value.		Book value.		Annual Cost of Upkeep.	
	1882-83.	1883-84.	1882-83.	1883-84.	1882-83.	1883-84.	1882-83.	1883-84.
			RS.	RS.	RS.	RS.	RS.	RS.
Steamer *Charles Orr* ...	1	1	8,242	8,322	7,586	4,161	600	600
Dredges	5	5	1,13,022	1,13,022	76,342	65,000	2,030	2,030
Iron punts	25	25	52,314	52,314	37,642	21,350	3,420	3,420
Wooden punts with iron ribs, composite... ...	6	9	16,500	23,362	14,690	18,900	1,050	1,530
Iron punt, small	1	1	...	...	...	250	30	30
Trap punt	...	1	...	3,652	...	3,300	...	175
Range or Inspection boats.	6	7	3,767	8,692	3,767	8,692	716	800
Wooden ball and cuts ...	2	2	1,350	1,350	1,054	500	180	180
Anicut paddle boat ...	1	1	900	900	810	700	90	90
Total ...	47	52	1,96,095	2,11,614	1,41,891	1,22,853	8,116	8,855

Three wooden composite punts with iron ribs, and one trap punt, were newly constructed. Range boat No. 5 was sold during the past official year under G.O., No. 639 I. of 1st October 1880, and boat No. 13 was purchased at a cost of Rs. 913.

2. The estimated cost of upkeep for the ensuing year amounts to Rs. 8,855, or Rs. 739 in excess of that for the current year. This is due to the increase in the number of punts and boats.

3. The Superintending Engineer has submitted an estimate of Rs. 730 for special repairs to punt No. 30, while its original and book values are only Rs. 400 and 250 respectively. The estimate cannot therefore be recommended for sanction.

KURNOOL,
21st November 1882.

(Signed) J. O. HASTED, Colonel, R.E.,
Chief Engineer for Irrigation.

To the Joint Secretary to Government, Public Works Department, Irrigation Branch.

No. 64.

ORDER—dated 24th November 1882, No. 945 I., Public Works.

The estimate, amounting to Rs. 8,855, for the upkeep of the floating plant belonging to the Kistna Delta, is approved for entry in the Budget Estimate of 1883-84.

(True Extract.)

(Signed) J. O. HASTED, Colonel, R.E.,
Ag. Joint Secy. to Govt., P.W.D.,
Irrigation Branch.

To the Superintending Engineer, Second Circle.
„ Chief Engineer for Irrigation, with two enclosures.
„ Examiner, Public Works Accounts.

IRRIGATION.
ACCOUNT.

Govt. of (1882) Madras.
PUBLIC WORKS.

Dated November, 24th.

Recd. *Encl.*

G.O., 24th Nov. 1882, No. 945 I.

NOVEMBER.
Nos. 63-64.

Kistna Delta, Floating Plant.

The estimate, amounting to Rs. 8,855, *for the upkeep of the* —, approved for entry in the Budget for 1883-84.

GOVERNMENT OF MADRAS.

PUBLIC WORKS DEPARTMENT.

Irrigation.

No 65.

READ—the following paper:—

No. 123 I.

Note by the Acting Chief Engineer for Irrigation.

The return for the half-year ended 30th June 1882 of the progress made in the repairs of tanks in the Trichinopoly Division, which affect the South Indian Railway, received from the Superintending Engineer, Sixth Circle, is submitted for the information of Government.

2. There are in all two hundred and seven tanks. Of these, it is stated that seventy-seven tanks are classed as Imperial, fifty-two are Inam tanks, nine are Devastanam tanks, thirty-two are private tanks, and thirty-seven are minor tanks. In a previous return, sixteen of the Imperial tanks were stated to be in good order, while fifty-nine were reported as in need of repairs, and two were to be abandoned. The index to the progress of the repairs of these tanks for the half-year under review shows no progress has been made in placing these tanks in efficient condition; this unsatifactory state of affairs should not be permitted to continue, and the tanks should be attended to as soon as possible.

KURNOOL, (Signed) J. O. HASTED, Col., R.E.,
21st November 1882. Ag. Chief Engr. for Irrigation.

To the Acting Joint Secretary to Government, Public Works Department, Irrigation Branch.

No. 66.

ORDER—dated 27th November 1882, No. 946 I., Public Works.

Ordered to be recorded. The attention of the Superintending Engineer, Sixth Circle, is called to the concluding paragraph of the Note of the Chief Engineer for Irrigation.

(True Extract.)

(Signed) J. O. HASTED, Colonel, R.E.,
Ag. Joint Secy. to Govt., P.W.D.,
Irrigation Branch.

To the Superintending Engineer, Sixth Circle.
" Chief Engineer for Irrigation, with six enclosures.
" Consulting Engineer for Railways.

IRRIGATION.

Govt. of {1882} Madras.

PUBLIC WORKS.

Dated November, 27th.

Recd. *Encl.*

G.O., 27th Nov. 1882, No. 946 I.

NOVEMBER.

Nos. 65-66.

Tanks.

Return showing progress made in the repair of — affecting the South Indian Railway in the Trichinopoly Division for the half-year ending 30th June 1882.

GOVERNMENT OF MADRAS.

PUBLIC WORKS DEPARTMENT.

Irrigation.
Account.

No. 67.

READ—the following letter from G. T. WALCH, Esq., Officiating Superintending Engineer, First Circle, to the Chief Engineer for Irrigation, dated Dowlaishweram, 6th November 1882, No. 1814 G.D. :—

With reference to your memorandum, No. 1/96 G.D., dated 22nd September 1882, I have the honor to forward herewith three * revised statements of expenditure proposed to be incurred on the Godávari Delta Project Works in three successive years from 1883-84.

* One for Eastern Delta.
One for Central "
One for Western "

REVISED—GODAVARI EASTERN DIVISION.

Schedule of Expenditure proposed to be incurred on the Godávari Delta Project Works in three successive years from 1883-84.

Names of Works.	Amount of Estimate.	Expenditure to end of 1881-82.	Allotment for the Season, 1882-83.		Amounts required in			Remarks.
			As provided in Budget.	As now proposed.	1883-84.	1884-85.	1885-86.	
EASTERN DIVISION.	RS.	RS.	RS.	RS.	RS.	RS.	RS.	
MAIN CANAL.								
(2.) *Main Canals and Branches.*								
I. N. Quarters for Lock Establishment	1,400	..	..	1,000	400	..	..	
BANK CANAL.								
B. Compensation for land ..	7,550	822	..	500	5,000	1,228	..	
F.(1) Inlet at Mulusthanam ..	700	..	..	700	..	..	..	
Under-tunnel, Injeram Drain ..	5,000	..	..	..	4,600	400	..	
Altering and improving Kondiya Weir	910	..	..	910	..	..	..	
H. Razu Calva Weir	2,000	..	..	..	2,000	..	..	
Minor Drainage Works in extension.	3,000	..	..	..	..	3,000	..	
I. N. Quarters for Lock Establishment	4,300	..	..	500	2,580	1,220	..	
I. N. Lock at Thalarenu ..	27,800	..	5,000	5,000	22,000	800	..	
L. Earthwork of Canal	1,42,780	1,13,272	20,000	15,000	14,000	500	..	
(3.) *Distributaries.*								
B. Compensation for land ..	1,800	..	..	..	..	800	1,000	
Head sluices, &c., C. Works ..	11,310	..	..	..	1,000	5,000	5,310	
L. Earthwork	4,000	..	..	..	..	2,000	2,000	
COCANADA CANAL.								
(2.) *Main Canals and Branches.*								
B. Land Compensation	2,000	1,760	..	..	..	..	..	
F. (1) Inlets, &c.	7,720	5,114	..	2,350	..	..	..	
Do. Culverts	3,200	..	3,200	..	..	..	..	
I. N. Quarters for Lock Establishment	4,880	..	..	500	4,380	..	..	
O. Miscellaneous, Cattle Crossings..	2,500	..	2,500	..	..	..	..	
(3.) *Distributaries.*								
B. Compensation for land ..	1,500	* 1,676	..	..	..	..	..	
C. Works, Head Sluices, &c. ..	27,959	23,458	3,805	3,700	630	..	..	
O. Miscellaneous, Cattle Crossings.	400	..	400	..	400	..	..	
L. Earthwork	12,473	11,256	300	1,000	..	200	..	

* There will have to be a transfer from compensation under (2) M. C. and B. to this.

Schedule of Expenditure proposed to be incurred on the Godávari Delta Project, &c.—*cont.*

Names of Works.	Amount of Estimate.	Expenditure to end of 1881-82.	Allotment for the Season, 1882-83. As provided in Budget.	Allotment for the Season, 1882-83. As now proposed.	Amounts required in 1883-84.	Amounts required in 1884-85.	Amounts required in 1885-86.	Remarks.
	RS.	RS.	RS.	RS.	RS.	RS.	RS.	
SAMALCOTTA CANAL.								
MAIN CANAL.								
(2.) *Main Canals and Branches.*								
I. N. Lock Establishment Quarters.	3,300	..	1,410	500	2,800	..	..	
L. Earthwork, Side Channels ..	17,398	12,212	5,186	..	..	..	..	
(3.) *Distributaries.*								
B. Compensation for land ..	4,080	2,605	1,947	500	900	75	..	
C. Works, Head Sluice, &c. ..	17,302	12,252	4,597	2,000	2,700	350	..	
L. Earthwork	17,398	12,221	..	3,000	2,000	..	..	
MANDAPETTA CANAL.								
(2.) *Main Canals and Branches.*								
I. N. Quarters for Lock Establishment	2,080	..	..	..	2,080	..	..	
O. Miscellaneous, Cattle Crossings.	1,200	..	..	500	..	700	..	
(3.) *Distributaries.*								
B. Compensation	2,000	1,434	..	..	..	466	..	
C. Works, Head Sluices, &c. ..	10,784	4,006	..	1,900	3,000	2,000	878	
L. Earthwork	8,396	7,296	..	300	..	800	..	
CORINGA CANAL.								
(2.) *Main Canals and Br nches.*								
F. (1) Inlets	1,300	..	..	..	..	1,300	..	
I. N. Quarters for Lock Establishment	3,660	..	..	..	3,660	..	..	
O. Miscellaneous, Cattle Crossings.	1,200	..	..	..	..	1,200	..	
L. Earthwork, Extending Canal to 30th Mile	34,670	34,668	2,000	..	..	..	..	
(3.) *Distributaries.*								
C. Works, Head Sluices, &c. ..	18,989	12,177	..	..	2,000	2,000	2,812	
L. Earthwork	7,731	5,976	..	..	..	1,000	755	
(4.) *Drainage and Protective Works.*								
Channel to Inlet at 27-30 ..	500	..	..	..	500	..	..	
INJERAM CANAL.								
(2.) *Main Canals and Branches.*								
I. N. Quarters for Lock Establishment	1,040	..	..	..	..	1,040	..	
L. Earthwork, Excavating Canal to 30th Mile	9,442	9,442	2,000	..	..	..	..	
(3.) *Distributaries.*								
B. Compensation for land ..	2,86[illegible]	3,185	..	..	..	..	..	
C. Works	8,670	2,321	..	..	2,090	2,090	2,349	
L. Earthworks	8,318	4,618	..	..	2,000	1,700	..	
THULIABHAGA DRAIN.								
B. Compensation for land ..	11,500	8,548	..	..	..	2,952	..	
C. Works	17,764	9,300	..	300	2,000	3,000	3,164	
L. Earthwork including Minor Drains	1,18,504	98,535	5,000	2000	5,000	8,000	5,000	
BICCAVOLU DRAIN.								
C. Works	9,170	5,461	1,200	600	1,400	1,000	709	
L. Earthwork	58,700	47,019	2,800	500	1,500	5,000	4,681	
TEKI DRAIN.								
B. Compensation for land ..	12,897	3,782	..	725	4,400	2,000	1,440	
C. Works	15,089	7,489	..	..	..	5,000	2,600	
L. Earthwork and Minor Drains ..	2,16,289	1,47,080	30,000	30,100	5,070	20,000	10,000	
Total, Works ..	..	..	91,405	74,085	1,00,000	76,731	42,698	
Tools and Plant, Special and Ferries.	24,900	..	..	2,000	9,000	9,000	4,900	

DOWLAISHWERAM,
6th November 1882.

(Signed) G. T. WALCH,
Offg. Suptg. Engr., First Circle.

Revised—Godavari Central Division.

Scheme of Expenditure proposed to be incurred on the Godávari Delta Project, Central Division in three successive years from 1883-84.

Names of Works.	Amount of Estimate.	Expenditure to end of 1881-82.	Allotment for the Season, 1882-83. As provided in Budget.	Allotment for the Season, 1882-83. As now proposed.	Amount required in 1883-84.	Amount required in 1884-85.	Amount required in 1885-86.	Remarks.
(1.) Head Works.	RS.	RS.	RS.	RS.	RS.	RS.	RS.	
C. Works.								
Under-sluice improvements ..	6,300	..	..	3,000	3,300	..	..	
K. Buildings.								
Rest-house at Ralli on Gunnaram Canal	2,500	..	..	1,500	1,000	..	..	
Do. at Anampalli on Bank Canal..	2,500	..	..	1,500	1,000	..	..	
Do. at Amalápuram on Amalapur Canal	2,500	..	..	1,500	1,000	..	..	
Do. (proposed to be built at Bendamurlunka instead of Gunnaram) on Bendamurlunka Canal ..	2,500	..	..	..	2,500	..	..	
MAIN CANAL.								
(2) Main Canals and Branches.								
I. Lock Establishment Quarters ..	1,220	..	..	..	1,220	..	..	
Improvements, Main Canal, L. Earthworks	39,000	..	..	300	200	5,500	14,000	
Head Sluice to Distributaries, C. Works	650	..	650	..	650	..	..	
GUNNARAM CANAL.								
(2.) Main Canals and Branches.								
B. Compensation for land ..	2,310	..	..	100	1,000	1,210	..	
F. Aqueduct Improvements ..	21,700	..	..	4,000	10,000	7,700	..	
F. Vepachettu Under-tunnel ..	3,740	..	..	..	..	3,740	..	
Escapes.								
H. Rámachandrapuram	5,270	..	..	..	3,000	2,270	..	
H. Bellampudi	4,400	..	..	400	3,000	1,000	..	
I. N. Ralli Lock	17,700	..	..	10,000	7,700	..	..	
I. Do. Weir	6,800	..	6,800	5,500	1,300	..	..	
H. Rámachandrapuram Escape Finder Bridge	390	..	..	..	390	..	..	
I. N. Rámachandrapuram Lock ..	18,160	..	..	1,300	8,700	8,160	..	
I. N. Do. do. Weir.	5,270	..	..	3,000	2,270	..	..	
H. Bellampudi Escape F. Pile Bridge	350	..	..	..	..	350	..	
I. N. Mandapulunka Lock ..	21,200	..	..	..	8,000	13,200	..	
I. N. Do. do. Weir ..	5,500	..	..	..	3,000	2,500	..	
I. N. Sivakódu Lock	19,660	..	..	..	..	8,000	11,660	
I. N. Do. Weir.. ..	2,750	..	..	..	..	2,000	750	
I. N. Sakinetipalli Lock	31,200	..	..	..	..	..	8,000	
I. N. Do. do. Weir ..	2,320	..	..	..	..	..	2,000	
I. N. Lock Establishment Quarters.	5,020	..	..	..	2,000	1,000	1,000	
L. Earthwork Improvements ..	1,15,600	..	9,910	5,000	15,000	15,000	15,000	
C. Head Sluices, &c., Distributaries.	16,350	..	..	..	..	3,000	3,000	
L. Earthwork	5,000	.	..	..	..	1,000	1,000	
BANK CANAL.								
(2.) Main Canals and Branches.								
B. Compensation for land ..	900	..	..	100	400	400	..	
F. Vridha Gowtami Under-tunnel..	9,680	..	..	..	3,000	6,680	..	
F. (1) Other Cross Drainage Works, Vucheli Inlet, &c.	5,010	..	..	..	2,000	3,010	..	
H. Escapes.								
I. N. Lolla Lock	17,550	..	4,300	1,000	8,000	8,550	..	
I. N. Do. Weir	4,300	..	..	3,000	1,300	..	..	
I. N. Vadalapalem Lock	18,510	..	..	..	..	8,000	10,510	
I. N. Do. do. Weir ..	4,470	..	..	..	..	3,000	1,470	
I. N. Chintalunka Lock	19,000	..	..	..	..	..	8,000	
I. N. Do. do. Weir ..	3,830	..	..	..	..	..	2,500	
I. N. Lock Establishment Quarters.	2,940	..	..	..	500	500	500	
L. Earthwork, Canal improvements.	53,320	..	..	..	500	9,500	15,000	
C. Head-sluices (Distributaries) ..	6,100	..	..	..	..	..	1,000	

Scheme of Expenditure proposed to be incurred on the Godávari Delta, &c.—*cont.*

Names of Works.	Amount of Estimate.	Expenditure to end of 1881-82.	Allotment for the Season, 1882-83. As provided in Budget.	Allotment for the Season, 1882-83. As now proposed.	Amount required in 1883-84.	Amount required in 1884-85.	Amount required in 1885-86.	Remarks.
AMALAPUR CANAL.	RS.	RS.	RS.	RS.	RS.	RS.	RS.	
(2.) MAIN CANALS AND BRANCHES.								
B. Compensation for land ..	120	..	..	120	..	..	..	
Escapes.								
H. Ralli Surplus Weir	10,200	..	..	..	..	..	5,000	
L. Earthwork Improvements ..	87,150	..	..	..	..	..	10,000	
I. N. Pallivella Lock and Weir Improvements. / Do. Lock Improvements.	4,640	..	2,210	..	..	..	4,000	
I. N. Mukkamala do. / Do. Lock Weir do.	7,190	..	..	..	..	..	6,000	
I. N. Nadupudi Lock Improvements. / I. N. Nadupudi do.	5,620	..	..	..	..	..	4,000	
(3.) Distributaries, C. Works, Head Sluice, Polaram Channel.	350	..	350	..	..	..	..	
BENDAMURLUNKA CANAL.								
(2.) MAIN CANALS AND BRANCHES.								
B. Compensation for land.. ..	690	..	..	..	..	..	..	
I. N. Indupalli Lock	20,170	..	..	..	8,000	12,170	..	
I. N. Do. do. Weir ..	1,300	..	..	..	1,300	..	..	
I. N. Lock Establishment Quarters.	860	..	..	..	..	860	..	
L. Earthwork Improvements ..	9,000	..	..	..	..	..	5,000	
(4.) DRAINAGES.								
Pallivella.								
B. Compensation for land ..	1,680	..	1,680	1,000	680	..	..	
L. Earthwork	4,100	..	4,100	2,000	2,100	..	..	
Gorinkala	30,433	..	..	3,000	12,000	12,000	3,400	
Kunaram	14,000	..	..	..	5,000	9,000	..	
LOWER KOWSICA.								
B. Compensation for land.. ..	220	..	..	..	220	..	..	
L. Earthwork	50,600	..	..	..	20,000	10,000	20,000	
Total ..	..	..	30,000	47,320	1,41,230	1,59,300	1,52,790	
Tools and Plant, Special and Ferries.	21,415	..	..	2,000	10,500	5,000	3,000	

DOWLAISHWERAM,
6th November 1882.

(Signed) G. T. WALCH,
Offg. Suptg. Engr., First Circle.

WESTERN DIVISION.

Scheme of Expenditure proposed to be incurred on the Godávari Delta Project in three successive years from 1883-84.

Names of Works.	Amount of Estimate.	Expenditure to end of 1881-82.	Allotment for the Season, 1882-83. As provided in Budget.	Allotment for the Season, 1882-83. As now proposed.	Amount required in 1883-84.	Amount required in 1884-85.	Amount required in 1885-86.	Remarks.
MAIN CANAL.	RS.	RS.	RS.	RS.	RS.	RS.	RS.	
B. Land—Compensation	2,000	1,300	..	..	700	..	..	
I. Navigation.								
Quarters, Lock Establishments ..	1,220	..	600	600	620	..	..	
KAKARAPURRU CANAL.								
MAIN CANALS AND BRANCHES.								
B. Land—Compensation	5,000	2,490	500	500	1,500	510	..	
F. (1) Other Cross Drainage Works.								
Improvements to drains	3,670	2,476	1,190	1,190	..	..	..	

Scheme of Expenditure proposed to be incurred on the Godávari Delta Project, &c.—*cont.*

Names of Works.	Amount of Estimate.	Expenditure to end of 1881-82.	Allotment for the Season, 1882-83. As provided in Budget.	Allotment for the Season, 1882-83. As now proposed.	Amount required in 1883-84.	Amount required in 1884-85.	Amount required in 1885-86.	Remarks.
KAKARAPURRU CANAL—*cont.*	RS.	RS.	RS.	RS.	RS.	RS.	RS.	
(3.) DISTRIBUTARIES.								
B. Land	540	..	100	100	440	..	..	
C. Works	9,433	2,300	2,800	2,800	4,300	..	..	
L. Earthworks	3,550	..	1,600	1,600	1,950	..	..	
GOSTANADI AND VELPUR.								
(2.) MAIN CANALS AND BRANCHES.								
B. Land	13,100	4,296	1,500	1,500	3,000	4,300	..	
F. (1)—Inlet	3,100	..	..	..	..	3,100	..	
G. Bridges	8,000	..	..	..	3,000	..	..	
H. Escapes	3,250	2,540	710	710	..	5,000	..	
I. Navigation.								
Vissakodér Lock	18,600	..	..	..	10,000	8,600	..	
Do. do. Weir	2,600	..	..	..	2,600	..	..	
Bhimavaram do.	24,500	..	..	..	..	12,000	12,500	
Quarters, Lock Establishments ..	3,440	..	500	500	1,220	860	860	
L. Earthwork	73,450	50,590	9,000	9,000	9,000	4,860	..	
(3.) DISTRIBUTARIES.								
B. Land—Compensation	1,290	..	400	400	890	..	..	
C. Works	20,232	4,869	4,000	4,000	2,000	4,000	4,000	
L. Earthworks	5,266	1,300	1,000	1,000	2,000	900	..	
BANK CANAL.								
(2.) MAIN CANALS AND BRANCHES.								
B. Land	4,420	3,788	..	..	600	..	..	
H. Escapes.								
Surplus Weir, Nakkala Head ..	3,500	..	1,000	1,000	2,500	..	..	
I. Navigation.								
Quarters for Lock Establishments ..	2,580	..	..	..	1,500	1,080	..	
(3.) DISTRIBUTARIES.								
B. Land	450	..	..	..	200	250	..	
C. Works	7,448	3,748	1,000	1,000	1,000	1,000	700	
L. Earthworks	4,826	1,576	..	..	2,000	1,200	..	
NARSAPUR CANAL.								
(2.) MAIN CANALS AND BRANCHES.								
I. Navigation.								
Quarters for Lock Establishment ..	8,000	..	1,000	1,000	2,000	2,000	3,000	
ELLORE CANAL.								
(2.) MAIN CANALS AND BRANCHES.								
(F.) Hill torrent works	13,714	9,574	2,000	2,000	2,000	100	..	
H. Escapes	5,564	2,204	1,000	1,000	2,360	..	..	
I. Navigation.								
Quarters for Lock Establishment ..	2,260	..	500	500	1,500	260	..	
B. Land Compensation	2,400	908	..	..	500	..	..	
ATTILI CANAL.								
(2.) MAIN CANALS AND BRANCHES.								
B. Land	3,000	1,562	..	..	500	900	..	
I. Navigation.								
Quarters for Lock Establishment ..	2,080	..	600	600	1,480	..	..	
JUNCTION CANAL.								
(2.) MAIN CANALS AND BRANCHES.								
I. Navigation.								
Quarters for Lock Establishment ..	1,400	..	..	..	..	1,400	..	

Scheme of Expenditure proposed to be incurred on the Godávari Delta Project, &c.—*cont.*

Names of Works.	Amount of Estimate.	Expenditure to end of 1881-82.	Allotment for the Season, 1882-83.		Amount required in			Remarks.
			As provided in Budget.	As now proposed.	1883-84.	1884-85.	1885-86.	
	RS.	RS.	RS.	RS.	RS.	RS.	RS.	
VENKIAH AND WEYERU.								
(2.) MAIN CANALS AND BRANCHES.								
I. Navigation.								
Quarters for Lock Establishment ..	4,160	..	..	..	1,040	1,720	1,400	
(3.) DISTRIBUTARIES.								
B. Land	500	100	..	..	200	200	..	
C. Works	18,780	4,168	1,000	1,000	2,000	3,000	5,000	
L. Earthworks	4,434	858	2,000	2,000	1,500	..	..	
UNDI CANAL.								
(2.) MAIN CANALS AND BRANCHES.								
B. Land	1,800	*1,500	..	..	..	300	..	*Includes also compensation paid on distributaries.
I. Navigation.								
Quarters for Lock Establishment ..	1,900	..	..	..	860	1,040	..	
(3.) DISTRIBUTARIES.								
B. Land	1,350	..	..	..	500	850	..	
C. Works	30,216	9,850	1,000	1,000	3,000	5,000	5,000	
L. Earthworks	34,123	16,473	2,000	2,000	5,000	5,000	5,000	
(4.) DRAINAGE AND PROTECTIVE Works.								
NAKKALA DRAIN.								
B. Land	400	..	..	..	400	..	..	Details of way in which this will be dealt with will probably differ from those sanctioned.
C. Works, Outfall Sluice ..	22,300	..	..	..	10,000	12,300	..	
GOSTANADI OUTFALL SLUICE.								
Now Gonter Drain.]								
B. Land	2,000	834	..	..	..	1,100	..	
L. Earthwork, *Baswarowkodu* ..	5,116	..	..	..	..	5,100	..	
YENAMADURRU DRAIN.								
C. Works	13,855	9,768	10,000	1,000	1,500	1,500	..	
Other Drains.								
L. Earthwork, Rudrayakodu ..	3,000	..	2,000	2,000	1,000	..	..	
Do. *Buggeswaram* ..	..	..	..	..	..	..	..	
B. Land	650	140	..	..	..	500	..	
L. Earthworks	..	..	..	..	..	..	..	
Improvements to lower portion ..	9,600	..	..	..	9,600	..	..	
Minor Drains.								
B. Land	200	..	..	..	..	200	..	
L. Earthwork, Irlakodu	9,000	..	..	..	..	5,000	4,000	
Unforeseen work	50,000	..	..	..	..	..	20,000	
Total ..	..	..	40,000	40,000	97,960	95,130	61,460	
Tools and Plant, Special and Ferries.	27,000	..	..	2,000	8,000	10,000	7,000	

DOWLAISHWERAM,
6th November 1882.

(Signed) G. T. WALCH,
Offg. Suptg. Engr., First Circle.

No. 68.

ORDER—dated 28th November 1882, No. 947 I., Public Works.

The programme of expenditure on the Godávari Delta canals to the end of 1885-86, as drawn up by the Superintending Engineer, First Circle, is approved.

2. The allotments for works in the Eastern and Central Sections will be modified to agree with the amounts now proposed for expenditure during the current year. The modifications of allotments involve a transfer of Rs. 1,582 from "B Land" to "Works." The share of establishment and tools and plant charges on this sum

amounts to Rs. 388, which will be appropriated from the balance of reserve under the head Productive Public Works, Capital Account.

3. The amount proposed for expenditure on special tools and plant during the current year will be appropriated on receipt of information called for in paragraph 2 of G.O., No. 704 I., of 6th September 1882, from the Superintending Engineer, Second Circle, regarding the amount which may be made available from the Kistna Delta.

4. The amount proposed for expenditure in 1883-84 is more than that entered in the rough budget estimate for that year by Rs. 36,223 including the share of establishment and tools and plant charges. This excess will, if it does not exceed the assignment fixed by the Government of India, be provided in the preliminary issue of the budget estimate for the ensuing year.

5. Ordered that a copy of these Proceedings be forwarded to the Government of India for information.

(Here enter No. 948 I., dated 28th November 1882.)

(True Extract.)

(Signed) J. O. HASTED, Colonel, R.E.,
Ag. Joint Secy. to Govt., P.W.D.,
Irrigation Branch.

To the Superintending Engineer, First Circle.
" " " Second Circle.
" Chief Engineer for Irrigation.
" Examiner of Public Works Accounts.
" Revenue Department.
" Board of Revenue.

No. 69.

ENDORSEMENT—dated 28th November 1882, No. 948 I., Public Works.

Forwarded.

(Signed) J. O. HASTED, Colonel, R.E.,
Ag. Joint Secy. to Govt., P.W.D.,
Irrigation Branch.

IRRIGATON.
ACCOUNT.

Govt. of (1882) Madras.

PUBLIC WORKS.

Dated November, 28th.

Recd. *Encl.*

G.O., 28th Nov. 1882, No. 948 I.

NOVEMBER.

Nos. 67—69.

Godavari Delta Canal.

Programme of expenditure on the — to the end of 1885-86.

GOVERNMENT OF MADRAS.

PUBLIC WORKS DEPARTMENT.

Irrigation.
Account.

No. 70.

Read—the following letter from C. H. WILKS, Esq., Executive Engineer, Kurnool Canal Division, to the Superintending Engineer, Third Circle, dated 26th October 1882, No. 351/45 S.E. III :—

With reference to the marginally-noted remarks by Examiner, Public Works Accounts, in audit note on accounts for August 1882, I have the honor to request that the orders of Government may be obtained regarding the adjustment of the items in question as exhibited in the enclosed statements.

" *Schedule of stock purchases and sales.*
" Items Nos. 1 and 2.—The orders of Government should be obtained, through the Superintending Engineer, regarding the adjustment of these items. This remark applies also to the assets of the Company credited to Deposits and Liabilities, *i.e.*, payments of salaries, &c., to establishment for periods prior to July 1882, to Miscellaneous Advances."

No. I.

Liabilities of the late Company on account of Salaries, &c., due prior to the transfer and disbursed subsequently and held at debit of Miscellaneous Advances.

Particulars.		Amount.	Total.
		RS. A. P.	RS. A. P.
Paid J. H. Latham, Esq., Chief Engineer and Manager, late Irrigation and Canal Company, salary from 1st to 6th July 1882—*Vide* G.O., No. 548 I., of 15th July 1882		522 9 3	
Pay of Medical staff at Kurnool for June 1882		13 5 4	
Paid Second Range, Lower Division, salary for May 1882 ...		(*a*) 442 9 5	
Paid Second Range Division salary for June 1882		(*b*) 452 10 1	
Do. do. Third Range for June		(*c*) 414 10 7	
Paid Lower Division Office Establishment for June 1882 ...		221 8 0	
Paid following travelling allowances—			
Bheema Row, Irrigation Clerk	34 8 0		
Husain Sahib	1 0 0		
		35 8 0	
Paid Cuddapah Store Establishment salaries for June 1882 ...		113 8 0	
Do. do. Workshop Establishment for June 1882 ...		30 8 0	

(*a*) Of this amount Rs. 303-1-5 is the salary of Bankers, &c., and may be charged off to earthwork.
(*b*) Do. do. " 313-2-1 is the salary of Bankers and may be treated as above.
(*c*) Do. do. " 216-5-3 being salaries of Bankers, &c., may be treated as above.

Liabilities of the late Company on account of Salaries, &c.—*cont.*

Particulars.		Amount.	Total.
		RS. A. P.	RS. A. P.
Lower Division, Contingent Establishment for June 1882 ...		51 5 4	
Lower Division, Chainmen salaries for June 1882		26 0 0	
Medical Establishment, Cuddapah, for June 1882		46 0 0	
A. B. Cruse, Esq., salary and allowance for June 1882 ...		420 0 0	
Paid following for June 1882:—			
Chakrapani Row, Overseer	33 5 4		
Lascar	6 0 0		
		39 5 4	
Paid Chakrapani Row allowance for June 1882		5 0 0	
Paid Pondurungum Moodelly, Dresser, batta for batta in May		8 0 0	
Paid J. O. Dunphy, Esq., balance of salary withheld pending settlement regarding cash deficiency, now disbursed under G.O., No. 698 I., dated 6th September 1882		257 7 7	
			3,099 14 11

26th October.

(Signed) C. H. WILKS,
Executive Engineer, K. C. Divn.

No. II.

Assets of the Company taken over by Government on 6th July 1882 and held in deposit.

—		Amount.	Total.
Cash.		RS. A. P.	RS. A. P.
Cash balance in Upper Division brought on Public Works Accounts	1,540 4 0		
Deduct value of stamped papers shown as portion of Upper Division balance	8 10 0		
		1,531 10 0	
Received from the Chief Accountant and Government Auditor, being balance of petty cash handed over on the 17th July	591 0 8		
Deduct value of stamped papers and cut ...	*10 2 0		
		580 14 8	
Realized by sale of 5 cut	... ...	2 13 0	
Cash balance in Lower Division on 6th July 1882	792 8 10		
Deduct value of stamped papers	9 12 0		
		782 12 10	
Received from J. H. Latham, Esq., Chief Engineer and Manager, late Madras Irrigation and Canal Company		†21,931 9 10	
In addition to the above the Examiner has directed that all monies realized by the sale of stores is to be credited to deposits *pro tem.* Instructions regarding the ultimate adjustment of the amounts so credited are requested.			
Total ...		...	24,829 12 4

* Of this amount the cut Rs. 5 (base coin) have been sold and realized Rs. 2-13-0.
† A portion of this amount will have to be disbursed on account of the liabilities of the Company; orders regarding the balance are required.

26th October.

(Signed) C. H. WILKS,
Executive Engineer, K. C. Divn.

Assets of the Company taken over by Government and held at credit of Stock Purchasers and Sales.

—	Amount.	Total.
Stock.	RS. A. P.	RS. A. P.
Value of stock taken from the stores of the Company and expended on works, &c., from 6th July to 30th September 1882 in Upper Division	687 6 6	
Do. do. in Lower Division	101 0 5	
		788 6 11
The value of the stock that will have to be retained for the use of the division will have to be treated in the same way as the above items, and instructions regarding final adjustment are requested.		
Total ...	...	788 6 11

26th October.

(Signed) C. H. WILKS,
Executive Engineer, K. C. Divn.

No. 1421.

Submitted to the Chief Engineer for Irrigation, through the Examiner, Public Works Accounts, for the orders of Government.

Three Lists.

2. The sum of Rs. 3,099-14-11 entered in Statement I represents salaries, &c., due to the Company's Establishment, prior to the transfer of the canal, and disbursed subsequently. Sanction is requested for its adjustment under the proper head.

3. Statement II shows Rs. 24,829-12-4, the assets of the Company taken over by Government, and orders solicited as to its disposal.

4. The Company's stock used on works in the Upper and Lower Divisions from 6th July to 30th September 1882 is valued at Rs. 788-6-11—*Vide* Statement III, and instructions are required as to the method of adjustment of this and similar stock of the Company that may hereafter be used on the works.

BELLARY,
4th November 1882.

(Signed) J. PENNYCUICK, Major, R.E.,
Supg. Engr., Third Circle.

No. 554 S.E. 3rd.

Endorsement on the above.

Submitted to the Chief Engineer for Irrigation with a copy of this office letter, No. 144 A., dated 10th November 1882, to the Accountant-General, Public Works Department.

10th November 1882.

(Signed) D. C. GORDON,
Examiner, Public Works Account.

Copy of letter from the Examiner, Public Works Accounts, to the Accountant-General, Public Works Department, dated 10th November 1882, No. 144 A.

In forwarding herewith statements, as per margin, in connection with the new Kurnool Canal Division, I have the honor to state that in the absence of definite instructions regarding the financial arrangements of the late Canal Company as affecting Government accounts, I have allowed the items appearing in Statement I to stand at debit of Miscellaneous Advances and those in Statements II and III at credit of deposits and stock purchases and

I. Statement of liabilities of the late Company on account of salaries, &c., due prior to the transfer and disbursed subsequently and debited to Miscellaneous Advances.
II. Statement showing the assets of the Company taken over by Government and held at credit of deposits.
III. Statement showing the assets of the Company held at credit of stock purchases and sales.

sales respectively. The balance at credit of the latter head will be further largely increased when the whole remaining stock of the late Company is valued and taken over.

2. As it appears desirable that early orders should issue as to the final adjustment of the items, I have to request the favor of your instructions on the subject.

No. 71.

ORDER—dated 28th November 1882, No. 949 I., Public Works.

The result of the reference made to the Accountant-General, Public Works Department, will be awaited.

2. The Superintending Engineer, Third Circle, will submit a statement showing the book and present value of stock articles taken over from the Company.

3. Ordered that a copy of these Proceedings be forwarded to the Government of India for information.

(Here enter No. 950 I., dated 28th November 1882.)

(True Extract.)

(Signed) J. O. HASTED, Colonel, R.E.,
Ag. Joint Secy. to Govt., P.W.D.,
Irrigation Branch.

To the Superintending Engineer, Third Circle.
" Chief Engineer for Irrigation.
" Examiner, Public Works Accounts.
" " Irrigation Accounts.

No. 72.

ENDORSEMENT—dated 28th November 1882, No. 950 I., Public Works.

Forwarded.

(Signed) J. O. HASTED, Colonel, R.E.,
Ag. Joint Secy. to Govt., P.W.D.,
Irrigation Branch.

IRRIGATION.
ACCOUNT.

Govt. of {1882} Madras.

PUBLIC WORKS.

Dated November, 28th.

Recd. *Encl.*

G.O., 28th Nov. 1882, No. 950 I.

NOVEMBER.

Nos. 70—72.

Madras Irrigation and Canal Company.

Adjustment of certain charges, &c., connected with the liabilities, assets, &c., of the late —.

GOVERNMENT OF MADRAS.

PUBLIC WORKS DEPARTMENT.

Irrigation.

No. 73.

READ—the following paper :—

Proceedings of the Board of Revenue, dated 8th November 1882, Mis. No. 8576.

Read—the following letter from H. A. SIM, Esq., Acting Head Assistant Collector, in charge Kurnool District, to the Secretary to the Board of Revenue, dated 14th October 1882, No. 457.

I have the honor, as directed in Board's Proceedings, No. 1758, dated 10th July 1882, to submit fresh No. X statements for Faslis 1289 and 1290, distinguishing "Imperial" from "Minor" Works.

FORM No. X.

STATEMENT of works for which a continuous record is not maintained by the Public Works Department, but which are accounted for collectively in the District of Kurnool.

Years.	GOVERNMENT.										
	Irrigable Area of Government and Inam.	Wet under Occupation. First Crop. Extent.	First Crop. Assessment. Land.	First Crop. Assessment. Water.	Second Crop. Extent.	Second Crop. Water-rate.	Dry Crops irrigated and dry converted into wet. Extent.	Dry Crops irrigated and dry converted into wet. Water-rate.	Miscellaneous Receipts due to Irrigation.	Total. Extent.	Total. Assessment and Water-rate.
1	2	3	4	5	6	7	8	9	10	11	12
			RS. A. P.	RS. A. P.		RS. A. P.		RS. A. P.	RS. A. P.		RS. A. P.
Major Works.											
A. Class	7,892 19	3,907 6	4,326 3 6	23,445 2 2	498 73	2,120 7 7	397 57	1,225 2 5	392 9 11	4,803 36	31,509 9 7
B. and C. Class ..	13,059 86	5,433 90	7,158 11 11	24,560 4 3	772 11	3,058 8 5	1,511 91	4,828 14 2	132 1 4	7,717 92	39,738 8 1
D. Class	213 36	118 53	87 7 5	628 1 7	46 45	146 10 7	32 0	38 11 10	..	196 98	900 15 5
Total ..	21,165 40	9,459 49	11,572 6 10	48,633 8 0	1,317 29	5,325 10 7	1,941 48	6,092 12 5	524 11 3	12,718 26	72,149 1 1
Minor Works.											
A. Class	2,734 89	1,226 85	1,715 4 8	6,078 9 5	215 59	994 12 8	172 83	535 6 10	324 11 11	1,615 27	9,648 13 6
B. and C. Class ..	14,030 72	6,916 79	6,508 14 1	31,375 13 1	432 42	1,459 0 0	997 93	2,811 8 6	709 8 9	8,347 14	42,864 12 5
D. Class	5,967 86	2,470 64	3,307 15 6	10,520 7 0	575 1	2,105 2 2	547 90	1,834 13 4	626 14 8	3,593 55	18,395 4 8
Total ..	22,733 47	10,614 28	11,532 2 3	47,974 13 6	1,223 2	4,558 14 10	1,718 66	6,181 12 8	1,661 3 4	13,555 96	70,908 14 7
Grand Total for Fasli 1289.	43,898 87	20,073 77	23,104 9 1	96,608 5 6	2,540 31	9,884 9 5	3,660 14	11,274 9 1	2,185 14 7	26,274 22	1,43,057 15 8
Major Works.											
A. Class	8,305 2	3,902 66	4,315 9 8	23,516 2 6	347 68	1,511 2 1	400 52	1,131 8 1	507 1 2	4,650 86	30,981 7 6
B. and C. Class ..	13,110 40	5,509 50	7,583 8 6	24,579 10 11	1,219 3	4,390 5 10	788 3	2,407 0 4	388 5 6	7,516 56	39,348 15 1
D. Class	258 83	127 59	94 4 9	561 15 3	43 19	109 8 6	3 83	15 13 1	..	174 61	781 9 7
Total ..	21,674 25	9,539 75	11,993 6 11	48,657 12 8	1,609 90	6,011 0 5	1,192 38	3,554 5 6	895 6 8	12,342 3	71,112 0 2
Minor Works.											
A. Class	2,597 53	1,157 90	1,590 1 5	5,547 13 7	215 41	835 1 6	95 85	299 5 4	55 10 7	1,469 16	8,328 0 5
B. and C. Class ..	15,543 70	6,549 60	6,386 4 11	30,212 5 3	574 92	1,743 5 4	521 66	1,464 13 2	957 15 3	7,646 18	40,764 11 11
D. Class	6,252 83	2,432 21	3,237 12 11	10,697 12 1	445 91	1,498 6 1	159 46	574 11 3	815 4 2	3,037 58	16,823 14 6
Total ..	24,394 6	10,139 71	11,214 3 3	46,457 14 11	1,236 24	4,076 12 11	776 97	2,338 13 9	1,828 14 0	12,152 92	65,916 10 10
Grand Total for Fasli 1290.	46,068 31	19,679 46	23,207 10 2	95,115 11 7	2,846 14	10,087 13 4	1,969 35	5,893 3 3	2,724 4 8	24,494 95	1,37,028 11 0

Statement of works for which a continuous record is not maintained by the Public Works Department, &c.—*cont.*

Years.	GOVERNMENT—*cont.*			INAM.						
				IRRIGATED FREE OF CHARGE.				IRRIGATED AND CHARGED.		
	Share of Assessment due to Irrigation, *i.e.*, sum of Columns 5, 7, 9 and 10.	Deduct Remissions including Land Assessment.	Net Revenue due to Irrigation, *i.e.*, difference between Columns 13 and 14.	First Crop.	Second Crop.	Quit-rent.		First Crop.		
				Extent.	Extent.	Land at One-third.	Water-rate at Two-thirds.	Extent.	Quit-rent.	Water-rate.
	13	14	15	16	17	18	19	20	21	22
FOR FASLI 1289.	RS. A. P.	RS. A. P.	RS. A. P.			RS. A. P.	RS. A. P.		RS. A. P.	RS. A. P.
Major Works.										
A. Class	27,183 6 1	3,118 2 3	24,065 3 10	2,423 81	176 31	2,684 9 6	6,468 0 0	368 37	156 10 10	1,255 5 0
B. and C. Class	32,579 12 2	3,110 3 11	29,469 8 3	4,868 59	402 46	3,956 12 1	7,971 10 6	811 61	177 5 5	2,516 2 7
D. Class	813 8 0	..	813 8 0	77 89	..	29 15 8	59 15 4	12 90	..	66 13 0
Total..	60,576 10 3	6,228 6 2	54,348 4 1	7,370 29	578 77	6,671 5 3	14,499 9 10	1,192 88	334 0 3	3,838 4 7
Minor Works.										
A. Class	7,933 8 10	1,104 4 3	6,829 4 7	1,125 37	5 29	1,444 1 3	1,918 8 9	333 42	38 9 4	830 2 11
B. and C. Class	36,355 14 4	6,196 12 7	30,159 1 9	5,198 53	16 16	3,745 10 6	7,763 11 7	514 83	223 7 0	1,701 14 9
D. Class	15,087 5 2	296 6 6	14,790 14 8	1,585 10	5 77	1,087 4 8	2,174 10 8	330 33	34 6 0	1,278 2 0
Total..	59,376 12 4	7,597 7 4	51,779 5 0	7,909 0	27 22	6,277 0 5	11,856 15 0	1,178 58	296 6 4	3,810 3 8
Grand Total for Fasli 1289.	1,19,953 6 7	13,825 13 6	1,06,127 9 1	15,279 29	605 99	12,948 5 8	26,356 8 10	2,371 46	630 6 7	7,648 8 3
FOR FASLI 1290.										
Major Works.										
A. Class	26,665 13 10	3,574 7 6	23,091 6 4	2,842 78	146 39	3,698 9 0	7,509 2 10	364 24	160 10 4	1,235 4 10
B. and C. Class	31,765 6 7	6,942 1 10	24,823 4 9	4,597 87	402 46	3,871 10 6	7,763 2 9	382 38	115 9 5	1,208 2 6
D. Class	687 4 10	32 15 0	654 5 10	76 99	..	26 4 8	52 9 4	14 89	..	63 1 0
Total..	59,118 9 3	10,549 8 4	48,569 0 11	7,517 64	548 85	7,596 8 2	15,324 14 11	761 51	276 3 9	2,506 8 4
Minor Works.										
A. Class	6,737 15 0	319 13 11	6,418 1 1	592 76	3 48	453 15 4	932 2 6	205 46	19 13 8	377 3 9
B. and C. Class	34,378 7 0	12,480 15 3	21,897 7 9	4,820 72	5 26	3,273 12 10	6,898 5 3	413 46	188 6 4	1,225 2 3
D. Class	13,586 1 7	2,043 4 10	11,542 12 9	1,406 17	16 53	923 2 11	1,859 8 10	159 99	12 15 3	734 1 3
Total..	54,702 7 7	14,844 2 0	39,858 5 7	6,819 65	25 27	4,650 15 1	9,690 0 7	778 91	221 3 3	2,336 7 3
Grand Total for Fasli 1290.	1,13,821 0 10	25,393 10 4	88,427 6 6	14,337 29	574 12	12,247 7 3	25,014 15 6	1,540 42	497 7 0	4,842 15 7

Statement of works for which a continuous record is not maintained by the Public Works Department, &c.—*cont.*

Years.	INAM—*cont.* Irrigated and Charged—*cont.* Second Crop. Extent.	INAM—*cont.* Irrigated and Charged—*cont.* Second Crop. Water-rate.	Total. Extent.	Total. Quit-rent and Water-rate.	Share of Assessment due to Irrigation, *i.e.*, sum of Columns 19, 22 and 24.	Deduct Remissions.	Net Revenue due to Irrigation, *i.e.*, difference between Columns 27 and 28.	Extent.	Net Revenue due to Irrigation, *i.e.*, sum of Columns 15 and 29.
	23	24	25	26	27	28	29	30	31
		RS. A. P.		RS. A. P.	RS. A. P.	RS. A. P.	RS. A. P.		RS. A. P.
Major Works.									
A. Class	77 56	281 11 4	3,046 5	10,846 4 8	8,005 0 4	..	8,005 0 4	7,849 41	32,070 4 2
B. and C. Class	482 85	404 11 1	6,565 51	15,026 9 8	10,892 8 2	..	10,892 8 2	14,283 43	40,362 0 5
D. Class	33 65	87 4 0	124 44	244 0 0	214 0 4	..	214 0 4	321 42	1,027 8 4
Total ..	594 6	773 10 5	9,736 0	26,116 14 4	19,111 8 10	..	19,111 8 10	22,454 26	73,459 12 11
Minor Works.									
A. Class	98 84	314 4 7	1,562 92	4,545 10 10	3,063 0 3	..	3,063 0 3	3,178 19	9,892 4 10
B. and C. Class	105 24	372 6 10	5,834 76	13,807 2 8	9,838 1 2	..	9,838 1 2	14,181 90	39,997 2 11
D. Class	114 23	428 5 3	2,035 43	5,002 12 7	3,881 1 11	..	3,881 1 11	5,628 98	18,672 0 7
Total ..	318 31	1,115 0 8	9,433 11	23,355 10 1	16,782 3 4	..	16,782 3 4	22,989 7	68,561 8 4
Grand Total for Fasli 1289.	912 37	1,888 11 1	19,169 11	49,472 8 5	35,893 12 2	..	35,893 12 2	45,443 33	1,42,021 5 3
Major Works.									
A. Class	29 13	114 6 7	3,382 54	12,718 1 7	8,858 14 3	..	8,858 14 3	8,033 40	31,950 4 7
B. and C. Class	402 95	837 5 1	5,785 66	13,795 14 3	9,808 10 4	51 6 4	9,757 4 0	13,302 22	34,580 8 9
D. Class	..	..	91 88	141 15 0	115 10 4	..	115 10 4	266 49	770 0 2
Total ..	432 8	951 11 8	9,260 8	26,655 14 10	18,783 2 11	51 6 4	18,731 12 7	21,602 11	67,300 13 6
Minor Works.									
A. Class	43 46	150 14 10	845 16	1,934 2 1	1,460 5 1	21 9 7	1,438 11 6	2,314 32	7,856 12 7
B. and C. Class	115 33	534 14 4	5,354 77	12,120 9 0	8,658 5 10	118 14 0	8,539 7 10	13,000 95	30,436 15 7
D. Class	64 61	200 1 9	1,647 30	3,729 14 0	2,793 11 10	..	2,793 11 10	4,684 88	14,336 8 7
Total ..	223 40	885 14 11	7,847 23	17,784 9 1	12,912 6 9	140 7 7	12,771 15 2	20,000 15	52,630 4 9
Grand Total for Fasli 1290.	655 48	1,837 10 7	17,107 31	44,440 7 11	31,695 9 8	191 13 11	31,503 11 9	41,602 26	1,19,931 2 3

KURNOOL,
14th October 1882.

(Signed) H. A. SIM,
Ag. Hd. Asst. Collector in Charge.

ENCLOSURE A—in No. 10.—Particulars of Deductions in Columns 14 and 28.

Year.	Whether Government or Inam.	Fixed.	Temporary.	Occasional, *i.e.*, Remissions proper including Land Assessment and Quit-rent of Inam. — Excess of Water.	Defect of Water.	Bad Seasons.	Other Causes.	Total of Deductions.
1	2	3	4	5	6	7	8	9
	FOR FASLI 1289. *Government.*	RS. A. P.	RS. A. P.	RS. A. P.	RS. A. P.	RS. A. P.	RS. A. P.	RS. A. P.
	Major Works—							
1289	A. Class ..	519 1 4	87 10 9	..	2,511 6 2	..	..	3,118 2 3
	B. and C. Class ..	909 6 0	336 5 6	..	1,832 2 8	..	32 5 9	3,110 3 11
	D. Class ..	..	..	..	..	..	..	..
	Total ..	1,428 7 4	424 0 3	..	4,343 8 10	..	32 5 9	6,228 6 2
	Minor Works—							
	A. Class ..	28 14 6	34 13 1	..	1,040 8 8	..	..	1,104 4 3
	B. and C. Class ..	706 4 2	1,076 7 11	..	4,363 12 2	..	50 4 4	6,196 12 7
	D. Class ..	6 8 0	110 12 8	..	179 1 10	..	..	296 6 6
	Total ..	741 10 8	1,222 1 8	..	5,583 6 8	..	50 4 4	7,597 7 4
	Grand Total ..	2,170 2 0	1,646 1 11	..	9,926 15 6	..	82 10 1	13,825 13 6
	Inams.							
	Major Works—							
	A. Class ..	..	..	..	..	..	..	..
	B. and C. Class ..	..	..	..	..	..	..	..
	D. Class ..	..	..	..	..	..	..	..
	Total ..	..	..	..	..	..	..	..
	Minor Works—							
	A. Class ..	..	..	..	..	..	..	..
	B. and C. Class ..	..	..	..	..	..	..	..
	D. Class ..	..	..	..	..	..	..	..
	Total ..	..	..	..	..	..	..	..
	Grand Total ..	..	..	..	..	..	..	..
	Total, Government and Inam ..	2,170 2 0	1,646 1 11	..	9,926 15 6	..	82 10 1	13,825 13 6
	FOR FASLI 1290. *Government.*							
	Major Works—							
1290	A. Class ..	87 2 5	..	..	3,487 5 1	..	..	3,574 7 6
	B. and C. Class ..	299 5 9	..	..	5,939 10 10	703 1 3	..	6,942 1 10
	D. Class ..	..	..	..	32 15 0	..	..	32 15 0
	Total ..	386 8 2	..	..	9,459 14 11	703 1 3	..	10,549 8 4
	Minor Works—							
	A. Class ..	11 14 4	..	..	307 15 7	..	..	319 13 11
	B. and C. Class ..	309 9 8	..	..	9,189 0 4	2,719 15 2	262 6 1	12,480 15 3
	D. Class ..	25 11 10	6 8 0	..	1,784 5 11	226 11 1	..	2,043 4 10
	Total ..	347 3 10	6 8 0	..	11,281 5 10	2,946 10 3	262 6 1	14,844 2 0
	Grand Total ..	733 12 0	6 8 0	..	20,741 4 9	3,649 11 6	262 6 1	25,393 10 4
	Inam.							
	Minor Works—							
	A. Class ..	..	..	..	..	..	..	..
	B. and C. Class ..	..	..	..	51 6 4	..	..	51 6 4
	D. Class ..	..	..	..	..	..	..	..
	Total ..	..	..	..	51 6 4	..	..	51 6 4
	Minor Works—							
	A. Class ..	..	..	..	21 9 7	..	..	21 9 7
	B. and C. Class ..	..	..	..	118 14 0	..	..	118 14 0
	D. Class ..	..	..	..	..	..	..	..
	Total ..	..	..	..	140 7 7	..	..	140 7 7
	Grand Total ..	..	..	..	191 13 11	..	..	191 13 11
	Total, Government and Inam ..	733 12 0	6 8 0	..	20,933 2 8	3,649 11 6	262 6 1	25,585 8 3

Class A. Irrigation works supplied by rivers and streams.
,, B. Groups of tanks rain-fed.
,, C. Isolated tanks rain-fed.
,, D. Miscellaneous works.

KURNOOL,
14th October 1882.

(Signed) H. A. SIM,
Ag. Hd. Asst. Collector in Charge.

Resolution—dated 8th November 1882, Mis. No. 8576.

Submitted to Government with reference to paragraph 2 of G.O., Public Works Department, dated 13th June 1882, No. 461 I.

(True Copy and Extract.)

(Signed) E. GIBSON,
Acting Secretary.

No. 74.

ORDER—dated 28th November 1882, No. 951 I., Public Works.

Communicated to the Superintending Engineer, Third Circle, for information.

(True Extract.)

(Signed) J. O. HASTED, Colonel, R.E.,
Ag. Joint Secy. to Govt., P.W.D.,
Irrigation Branch.

To the Superintending Engineer, Third Circle.
,, the Chief Engineer for Irrigation.
,, the Examiner, Public Works Accounts.
,, the Revenue Department.
,, the Board of Revenue, with two enclosures.
,, W. Wilson, Esq.

IRRIGATION.

Govt. of (1882) Madras.

PUBLIC WORKS.

Dated November, 28th.

Recd. *Encl.*

G.O., 28th Nov. 1882, No. 951 I.

NOVEMBER.

Nos. 73-74.

Irrigation Works, Kurnool.

Revised Statement No. X showing Revenue derived from — submitted by the Collector for Faslis 1289 and 1290, communicated to the Superintending Engineer, Third Circle.

GOVERNMENT OF MADRAS.

PUBLIC WORKS DEPARTMENT.

Irrigation.
Account.

No. 75.

READ—the following letter from J. W. RUNDALL, Esq., Superintending Engineer, Second Circle, to the Chief Engineer for Irrigation, dated Masulipatam, 1st November 1882, No. 782, S.G. :—

I have the honor, with reference to your No. 36 N.L. of the 29th May, to forward herewith, revised plans and estimates for the two head sluices in the Kanigiri reservoir, accompanied with a report. The estimates for the channels and other works included under main head (3) Distributaries are being revised, but as Captain Campbell wants to put these works in hand at once sanction to the revised estimates at an early date is solicited.

Two Plans.
" Detailed and Abstract Estimates.
" Comparative Statements.
" duplicate copies of Abstract Estimates.
One Report.

No. 76.

ORDER—dated 28th November 1882, No. 952 I., Public Works.

The revised estimates for the construction of two head sluices to the distributary channels taking off from the Kanigiri reservoir are sanctioned as follows :—

Productive Public Works.
Capital Account.
Sangum Anicut Project.
(3) Distributaries.
Kanigiri Reservoir.
Eastern Channel.
C. Works.

	RS.
Head sluice.—Estimate	20,620

Southern and Central Channel.
C. Works.

	RS.
Head sluice.—Estimate	9,330
Total...	29,950

2. The sum of Rs. 29,050, being the difference between the original and revised estimates, will be reserved for unforeseen works.

3. This sanction has been registered as No. 46 I. of 1882-83.

4. Ordered that a copy of these Proceedings be forwarded to the Government of India for information.

(Here enter No. 953 I., dated 28th November 1882.)

(True Extract.)

(Signed) J. O. HASTED, Colonel, R.E.,
Ag. Joint Secy. to Govt., P.W.D.,
Irrigation Branch.

To the Superintending Engineer, Second Circle.
,, Chief Engineer for Irrigation, with twelve enclosures.
,, Examiner, Public Works Accounts, with two Abstract Estimates.
,, Revenue Department.
,, Board of Revenue.

No. 77.

ENDORSEMENT—dated 28th November 1882, No. 953 I., Public Works.

Forwarded.

(Signed) J. O. HASTED, Colonel, R.E.,
Ag. Joint Secy. to Govt., P.W.D.,
Irrigation Branch.

IRRIGATION.
ACCOUNT.

Govt. of {1882} Madras.

PUBLIC WORKS.

Dated November, 28th.

Recd. *Encl.*

G.O., 28th Nov. 1882, No. 953 I.

NOVEMBER.

Nos. 75—77.

Sangum Project—Head Sluices.

The revised estimates for two — to the distributary channels taking off from the Kanigiri reservoir, sanctioned.

GOVERNMENT OF MADRAS.

PUBLIC WORKS DEPARTMENT.

Irrigation.

No. 78.

READ—the following paper :—

G.O., dated 19th October 1882, No. 1145, Revenue Department.

No. 79.

ORDER—dated 29th November 1882, No. 955 I., Public Works.

Communicated to the Superintending Engineer, Sixth Circle, with reference to G.O., No. 705 I., dated 16th September 1882.

2. The Superintending Engineer will arrange for an early commencement of the construction of the Cauvery regulators and for the speedy restoration of the Nunjamanaur channel head sluice.

(True Extract.)

(Signed) J. O. HASTED, Colonel, R.E.,
Ag. Joint Secy. to Govt., P.W.D.,
Irrigation Branch.

To the Superintending Engineer, Sixth Circle.
" Chief Engineer for Irrigation.
" Revenue Department.
" Financial Department.
" Examiner, Public Works Accounts.
" Board of Revenue, with two enclosures.

Govt. of {1882} Madras.

PUBLIC WORKS.

Dated November, 29th.

Recd. *Encl.*

G.O., 29th Nov. 1882, No. 955 I.

NOVEMBER.

Nos. 78-79.

Tanjore—Floods.

Communicating to the Superintending Engineer, Sixth Circle, Proceedings in the Revenue Department on the damages caused by the —, and directing the early execution of work connected with the Cauvery regulators and the Nunjamanaur channel head sluice.

GOVERNMENT OF MADRAS.

PUBLIC WORKS DEPARTMENT.

Irrigation.
Account.

No. 80.

READ—the following letter from J. W. RUNDALL, Esq., Superintending Engineer, Second Circle, to the Chief Engineer for Irrigation, dated Camp, Bezváda, 10th November 1882, No. 1504 K.S.—

I have the honor, in reply to paragraph 3 of G.O., No. 824 I., of the 16th ultimo, to request that the following transfer of funds may be made to provide funds for the construction of the iron punts.

2. The funds can be surrendered from the Polaraz Canal and Peda Kommileru Drain, respectively, as the revised estimates for these works, though under preparation, have not been sanctioned.

From. 37. Productive Public Works. (Capital Account.) Kistna Delta System. Eastern Section.		*To* Special Tools and Plant.	
Budget Item.	RS.		RS.
21. (3) Distributaries Polaraz Canal. C. Works—Bridge 6th mile ...	1,000		
L. Earthwork channel ...	2,000		
22. (4) Drainage and Protective Works, Pedda Kommileru Drain, L. Earthworks—Drain	2,000	Iron Punts	5,000

No. 81.

ORDER—dated 29th November 1882, No. 956 I., Public Works.

The following transfer of funds is sanctioned subject to the confirmation of the Government of India :—

37. Productive Public Works.
Capital Account.
Kistna Delta System.
Eastern Section.

From Works. (3) Distributaries. Polraz Canal, (Budget Item No. 21.)	RS.	*To* Tools and Plant. Special Plant.	RS.
C. Works—Bridge 6th mile ...	1,000	Iron punts.	5,000
L. Earthwork	2,000		
4. Drainage and Protective Works. Pedda Kommileru Drain (Budget Item No. 22.)			
L. Earthwork	1,016		
Total ...	4,016		
Establishment at 23 per cent. ...	924		
Tools Plant at 1½ per cent.	60		
	5,000		5,000

2. Ordered that a copy of these Proceedings be forwarded to the Government of India, who will be requested to confirm the sanction to the proposed transfer of funds.

(Here enter No. 957 I., dated 29th November 1882.)

(True Extract.)

(Signed) J. O. HASTED, Colonel, R.E.,
Ag. Joint Secy. to Govt., P.W.D.,
Irrigation Branch.

To the Superintending Engineer, Second Circle.
" Chief Engineer for Irrigation
" Examiner, Public Works Accounts.

No. 82.

ENDORSEMENT.—dated 29th November 1882, No. 957 I., Public Works.

Forwarded.

(Signed) J. O. HASTED, Colonel, R.E.,
Ag. Joint Secy. to Govt., P.W.D.,
Irrigation Branch.

IRRIGATION.
ACCOUNT.

Govt. of (1882) Madras.

PUBLIC WORKS.

Dated November, 29th.

Recd. *Encl.*

G.O., 29th Nov. 1882, No. 957 I.

NOVEMBER.

Nos. 80–82.

Kistna Delta System—Iron Punts.

FORWARDING for confirmation Proceedings sanctioning certain transfers of funds to provide for the construction of the —.

GOVERNMENT OF MADRAS.

PUBLIC WORKS DEPARTMENT.

Irrigation.
Account.

No. 83.

READ—the following papers :—

From J. W. RUNDALL, Esq., Superintending Engineer, Second Circle, to the Chief Engineer for Irrigation, dated Commamur Canal, 5th October 1882, No. 676 S.G.—(Through the Examiner of Public Works Accounts).

I have the honor to bring to your notice that the Examiner of Public Works Accounts has refused* to accept the accompanying completion report for the work done under sub-head K. Buildings of (1) Head Works of the Sangum project. The Examiner requires detailed work vouchers by sub-heads.

One Work Voucher.
„ Completion Report.

* In Examiner's No. 304 S.E., 2nd, dated 18th September 1882, to the Executive Engineer, Sangum.

2. The Executive Engineer explains that these were not maintained from the commencement, and that thus it is impossible to furnish them now.

3. You are aware from the correspondence which has taken place regarding these buildings, that immediately on Captain Campbell's proceeding to Sangum he started work by commencing the temporary buildings in order to get shelter for the establishment to be employed on the works. The buildings were thus in some cases started before complete estimates had been worked out. When Captain Campbell's estimates reached your office, Colonel Mullins objected to the estimates and directed their revision. The estimates were revised once or twice, the buildings being altered from time to time, and the estimates were finally sanctioned in G.O., No. 471 I., of the 15th June 1882.

4. Even if the Executive Engineer had commenced keeping the accounts by detailed sub-heads, the frequent alterations ordered would, I think, have rendered comparison by sub-heads almost useless.

5. I would therefore request that authority may be given to the Examiner to accept the completion report.

6. As regards the second part of the Examiner's letter to the Executive Engineer, Sangum, I have the honor to state that in accordance with your memorandum No. $\frac{2}{72\text{ N.L.}}$, dated 21st September, the sum of Rs. 2,005 has been transferred from sub-head K. Buildings to sub-head P. Maintenance in the registers in my office.

No. 881 S.E. 2nd.

Endorsement on the above.

Forwarded to the Chief Engineer for Irrigation with the following remarks.

The Code Rules (paragraph 1685) are clear on the subject of the accounts of works costing over Rs. 2,500 being kept by sub-heads in the register of works.

2. In disposing of the accounts for August 1881, *i.e., the month in which the buildings were put in hand*, the Executive Engineer was asked to submit a detailed work voucher, and it was further explained to this officer, with reference to his reply, "under revision," that the fact of the revision of the estimate in no way prevented the submission of the document and he was requested to forward one (*vide* extract from audit note herewith sent).

3. The calls for detailed work vouchers were regularly repeated month after month in the divisional audit notes and objectionable items statements, and the replies furnished by the Executive Engineer in the latter documents, from October 1881 to March 1882, led to the supposition that they would be furnished eventually. In May and June 1882 the Executive Engineer reported that there was delay pending final statement of a few items of work being finished, and the remarks offered therein by the Superintending Engineer were to the effect that the work was completed and that completion report would be shortly sent in.

4. It will be noticed therefore that the Executive Engineer was warned that detailed work vouchers were required, and his own explanations led this office to conclude that steps had really been taken to comply.

5. The want of detailed work vouchers was brought to the notice of Government in the marginally noted Provincial Objectionable Item Statements of the Second Circle, and in paragraph 3 of this office letter No. 15 I. of 9th March 1882, printed with G.O., No. 294 I. of 28th March 1882, and the reiterated orders of Government to the Superintending Engineer, to see that detailed work vouchers were furnished without delay, have been apparently overlooked. I should mention that the outlay up to date has been only provisionally accepted by this office, and it now remains for Government to pass orders.

Item 33 of September 1881.
,, 36 ,, October ,,
,, 40 ,, November ,,
,, * 1 ,, December ,,
,, 52 ,, January 1882.
,, 49 ,, February ,,
,, 53 ,, March ,,
,, 49 ,, April ,,
,, 49 ,, May ,,
,, 50 ,, June ,,

* Under "work vouchers not submitted for work costing over Rs. 2,500."

(Signed) D. C. GORDON,
Examiner, Public Work Accounts.

31st October 1882.

No. 83-A.

Office Note to the Examiner, Public Works Accounts, dated 1st November 1882, No. 264.
,, from ,, ,, ,, ,, 20th ,, ,, ,, 696.

No. 84.

ORDER—dated 29th November 1882, No. 958 I., Public Works.

The Examiner of Public Works Accounts is authorized to accept the completion report for the work done under (1) Head Works, K. Buildings, of the Sangum Anicut Project, as submitted by the Executive Engineer.

(True Extract.)

(Signed) J. O. HASTED, Colonel, R.E.,
Ag. Joint Secy. to Govt., P.W.D.,
Irrigation Branch.

To the Superintending Engineer, Second Circle.
,, Chief Engineer for Irrigation.
,, Examiner, Public Works Accounts, with three enclosures.

IRRIGATION.
ACCOUNT.

Govt. of (1882) Madras.

PUBLIC WORKS

Dated November, 29th.

Recd. *Encl*

G.O., 29th Nov. 1882, No. 958 I.

NOVEMBER.

Nos. 83-84.

Sangum Project, Head Works, K. Buildings.

The Examiner authorized to accept the completion report for work done under — as submitted by the Executive Engineer.

GOVERNMENT OF MADRAS.

PUBLIC WORKS DEPARTMENT.

Irrigation.
Account.

No. 85.

READ—the following letter from the Executive Engineer in charge, First Circle, to the Chief Engineer for Irrigation, dated Dowlaishweram, 13th October 1882, No. 1613 G.D. :—

I have the honor to forward herewith the annual statement of the Irrigation "Floating Plant," Godávari District, showing the probable cost of upkeep during the year 1883-84, and to state that the total amount required, viz., Rs. 17,561, will be provided in the next year's budget now under preparation in this office.

ENCLO

STATEMENT of the Irrigation Floating Plant in the Godávari District showing the Nature of Employment,

Registered Number.	DETAILS OF PLANT.			MEASUREMENT OF PLANT.							
	Description.	Names of Boats, &c.	Date of Construction.	Hull over all.			Extra Width for Paddle Box.	When loaded.		Engines.	
				Length.	Breadth.	Depth.		Draft.	Tons carried.	Number of Horse-power.	Description.
1	2	3	4	5	6	7	8	9	10	11	12
..	Steamer	*Shamrock* ..	1859-60 ..	95	$14\frac{1}{2}$	$4\frac{1}{4}$	$9\frac{1}{2}$	3	$144\frac{7}{9}$	16	High pressure.
..	Do.	*Thistle*	1859-60 ..	95	$14\frac{1}{2}$	$4\frac{1}{4}$	$9\frac{1}{2}$	3	$144\frac{7}{9}$	12	Do.
..	Do.	*Arthur Cotton* ..	1878-79 ..	60′ 10″	9′ 6″	5	..	3′ 1″	$39\frac{4}{9}$	5 each.	Do. Double engine.
..	Do.	*Victoria*	1881-82 ..	$91\frac{1}{2}$	13	$5\frac{1}{2}$	..	3	68	150	Surface condense
..	Jolly boat	Whale boat ..	1878-79 ..	24′ 6″	7′ 0″	..	1	$3\frac{1}{3}$	..	..	..
1	Iron flat	Canal iron flat ..	1872-73 ..	72	12	3	..	$2\frac{1}{4}$	30	..	..
2	Iron punt	Canal iron punt ..	1859-60 ..	60	$10\frac{1}{3}$	$2\frac{3}{4}$	..	2	18	..	..
3	Do.	Do. ..	1859-60 ..	60	$10\frac{1}{3}$	$2\frac{3}{4}$	..	2	18	..	..
4	Do.	Do. ..	1859-60 ..	60	$10\frac{1}{3}$	$2\frac{3}{4}$	..	2	18	..	..
5	Do.	Do. ..	1859-60 ..	60	$10\frac{1}{3}$	$2\frac{3}{4}$	..	2	18	..	..
6	Do.	Do. ..	1859-60 ..	60	$10\frac{1}{3}$	$2\frac{3}{4}$	..	2	18	..	..
7	Do.	Do. ..	1859-60 ..	60	$10\frac{1}{3}$	$2\frac{3}{4}$	..	2	18	..	..
8	Do.	Do. ..	1859-60 ..	60	$10\frac{1}{3}$	$2\frac{3}{4}$	..	2	18	..	..
9	Do.	Do. ..	1859-60 ..	60	$10\frac{1}{3}$	$2\frac{3}{4}$	..	2	18	..	..
10	Do.	Do. ..	1859-60 ..	60	$10\frac{1}{3}$	$2\frac{3}{4}$	..	2	18	..	..
11	Do.	Do. ..	1859-60 ..	60	$10\frac{1}{3}$	$2\frac{3}{4}$	..	2	18	..	..
13	Iron dredge punt ..	Iron dredge punt ..	1871-72 ..	30	13	$2\frac{1}{2}$	..	$1\frac{3}{4}$	13	..	..
14	Iron punt	Canal iron punt ..	1859-60 ..	60	$10\frac{1}{3}$	$2\frac{3}{4}$	..	2	18	..	..
15	Do.	Do. ..	1859-60 ..	60	$10\frac{1}{3}$	$2\frac{3}{4}$	..	2	18	..	..
16	Do.	Do. ..	1859-60 ..	60	$10\frac{1}{3}$	$2\frac{3}{4}$	..	2	18	..	..
17	Do.	Do. ..	1859-60 ..	60	$10\frac{1}{3}$	$2\frac{3}{4}$	..	2	18	..	..
18	Iron dredge punt ..	Iron dredge punt ..	1871-72 ..	30	13	$2\frac{1}{2}$	..	$1\frac{3}{4}$	13	..	..
19	Iron punt	Canal iron punt ..	1859-60 ..	60	$10\frac{1}{3}$	$2\frac{3}{4}$	..	2	18	..	..
20	Do.	Do. ..	1859-60 ..	60	$10\frac{1}{3}$	$2\frac{3}{4}$	..	2	18	..	..
21	Iron dredge punt ..	Iron dredge punt ..	1871-72 ..	30	13	$2\frac{1}{2}$	..	$1\frac{3}{4}$	13	..	..
22	Do. do. ..	Do. ..	1871-72 ..	30	13	$2\frac{1}{2}$	..	$1\frac{3}{4}$	13	..	..
23	Iron punt	Canal iron punt ..	1859-60 ..	60	$10\frac{1}{3}$	$2\frac{3}{4}$	..	2	18	..	..
24	Do.	Do. ..	1859-60 ..	60	$10\frac{1}{3}$	$2\frac{3}{4}$	..	2	18	..	..
25	Do.	Do. ..	1859-60 ..	60	$10\frac{1}{3}$	$2\frac{3}{4}$	..	2	18	..	..
26	Do.	Do. ..	1859-60 ..	60	$10\frac{1}{3}$	$2\frac{3}{4}$	..	2	18	..	..
27	Do.	Do. ..	1859-60 ..	60	$10\frac{1}{3}$	$2\frac{3}{4}$	..	2	18	..	..
28	Do.	Do. ..	1859-60 ..	60	$10\frac{1}{3}$	$2\frac{3}{4}$	..	2	18	..	..
29	Do.	Do. ..	1859-60 ..	60	$10\frac{1}{3}$	$2\frac{3}{4}$	..	2	18	..	..
30	Do.	Do. ..	1859-60 ..	60	$10\frac{1}{3}$	$2\frac{3}{4}$	..	2	18	..	..
31	Do.	Do. ..	1859-60 ..	60	$10\frac{1}{3}$	$2\frac{3}{4}$	..	2	18	..	..
32	Do.	Do. ..	1859-60 ..	60	$10\frac{1}{3}$	$2\frac{3}{4}$	..	2	18	..	..
33	Do.	Do. ..	1859-60 ..	60	$10\frac{1}{3}$	$2\frac{3}{4}$	..	2	18	..	..
34	Iron flat	Canal iron flat ..	1860-61 ..	61	$11\frac{1}{2}$	$3\frac{1}{2}$	..	$2\frac{1}{2}$	28	..	..
36	Iron punt	Canal iron punt ..	1859-60 ..	60	$10\frac{1}{3}$	$2\frac{3}{4}$	..	2	18	..	..
37	Do.	Do. ..	1859-60 ..	60	$10\frac{1}{3}$	$2\frac{3}{4}$	..	2	18	..	..
38	Do.	Do. ..	1859-60 ..	60	$10\frac{1}{3}$	$2\frac{3}{4}$	..	2	18	..	..
39	Do.	Do. ..	1859-60 ..	60	$10\frac{1}{3}$	$2\frac{3}{4}$	..	2	18	..	..
40	Iron deep boat ..	Iron deep boat ..	1860-61 ..	$80\frac{1}{2}$	$10\frac{3}{4}$	5	..	4	50	..	..
42	Do. ..	Do. ..	1861-62 ..	60	$12\frac{1}{2}$	5	..	4	48	..	..

SURE.

the Cost of Upkeep, and the Fund or Estimate from which to be maintained during the year 1883-84.

Machinery, &c.				Average Speed, Miles per Hour.	Value of Plant.		Cost of Annual Upkeep.	Where and how employed.				Remarks.
Boilers.		Propellers.										Present Condition and how to be disposed of if irreparable.
Pressure.	Description.	Description.	Revolution.		Original.	Present Book Value.		District.	Locality.	Work.	Fund.	
13	14	15	16	17	18	19	20	21	22	23	24	25
LB.					RS.	RS.	RS.					
60	High pressure	Side paddles	22	6	20,014	10,107	436	..	..	Towing boats.	..	Machinery, &c., undergoing ordinary repairs.
60	Do.	Do.	22	5	20,014	7,376	510	..	..	Do.	..	Hull sound, but machinery weak and worn out.
80	Do. horizontal.	Twin screw.	80	10	9,535	8,309	210	..	..	Do	..	In fair working order; machinery requires slight repairs.
60	..	..	323	13	50,956	50,956	569	..	..	Do.	..	In good order (only put together in 1881-82).
..	..	..	..	..	..	..	92	..	..	..	..	In good order; lately repaired.
..	..	..	..	Generally towed, sometimes sail.	6,243	2,555	168	..	..	Conveying materials.	..	Decks in bad order; require to be repaired in addition to annual repairs.
..	..	..	..	Do.	2,812	2,232	136	..	..	Do.	..	} In good order; lately repaired.
..	..	..	..	Do.	2,811	2,256	136	..	..	Do.	..	
..	..	..	..	Do.	2,811	2,157	136	..	..	Do.	..	Decks in bad order; require to be repaired in addition to annual repairs.
..	..	..	..	Do.	2,812	2,408	136	..	..	Do.	..	
..	..	..	..	Do.	2,812	1,479	136	..	..	Do.	..	
..	..	..	..	Do.	2,812	2,386	136	..	..	Do.	..	
..	..	..	..	Do.	2,812	2,378	136	..	..	Do.	..	} In good order; lately repaired.
..	..	..	..	Do.	2,812	2,188	136	..	..	Do.	..	
..	..	..	..	Do.	2,812	2,206	136	..	..	Do.	..	
..	..	..	..	Do.	2,812	2,407	136	..	..	Do.	..	
..	..	..	..	Do.	2,310	1,092	74	..	..	Conveying silt.	..	Require annual repairs.
..	..	..	..	Do.	2,811	2,246	136	..	..	Conveying materials.	..	In working order; require annual repairs.
..	..	..	..	Do.	2,812	2,421	136	..	..	Do.	..	} In good order; lately repaired.
..	..	..	..	Do.	2,812	2,194	136	..	..	Do.	..	
..	..	..	..	Do.	2,812	1,599	136	..	..	Do.	..	
..	..	..	..	Do.	2,310	1,087	74	..	..	Conveying silt.	..	Require annual repairs.
..	..	..	..	Do.	2,812	1,674	136	..	..	Conveying materials.	..	In good order; lately repaired.
..	..	..	..	Do.	2,812	2,142	136	..	..	Do.	..	In working order; require annual repairs.
..	..	..	..	Do.	2,310	921	74	..	..	Do. silt.	..	} Require annual repairs.
..	..	..	..	Do.	2,310	992	74	..	..	Do.	..	
..	..	..	..	Do.	2,812	1,947	136	..	..	Do. materials.	..	Decks in bad order; require to be repaired in addition to annual repairs.
..	..	..	..	Do.	2,812	2,202	136	..	..	Do.	..	} In good order; lately repaired.
..	..	..	..	Do.	2,811	2,325	136	..	..	Do.	..	
..	..	..	..	Do.	2,811	2,427	136	..	..	Do.	..	
..	..	..	..	Do.	2,811	1,697	136	..	..	Do.	..	In working order; require annual repairs.
..	..	..	..	Do.	2,811	2,368	136	..	..	Do.	..	} In good order; lately repaired.
..	..	..	..	Do.	2,811	1,753	136	..	..	Do.	..	
..	..	..	..	Do.	2,811	2,541	136	..	..	Do.	..	
..	..	..	..	Do.	2,811	1,660	136	..	..	Do.	..	} In working order; require annual repairs.
..	..	..	..	Do.	2,811	2,025	136	..	..	Do.	..	
..	..	..	..	Do.	2,811	2,120	136	..	..	Do.	..	
..	..	..	..	Do.	4,693	3,099	168	..	..	Do.	..	
..	..	..	..	Do.	2,812	2,347	136	..	..	Do.	..	
..	..	..	..	Do.	2,812	2,086	136	..	..	Do.	..	} In good order; lately repaired.
..	..	..	..	Do.	2,811	1,578	136	..	..	Do.	..	
..	..	..	..	Do.	2,811	1,815	136	..	..	Do.	..	
..	..	..	..	Do.	4,693	3,232	208	..	..	Do.	..	Requires renewal of upper portion of wall (or side) plates in addition to annual repairs.
..	..	..	..	Do.	5,000	2,889	208	..	..	Do.	..	

Statement of the Irrigation Floating Plant in the Godávari District showing the Nature of Employment,

Registered Number.	Details of Plant.			Measurement of Plant.						Engines.	
	Description.	Names of Boats, &c.	Date of Construction.	Hull over all. Length.	Hull over all. Breadth.	Hull over all. Depth.	Extra Width for Paddle Box.	When loaded. Draft.	When loaded. Tons carried.	Number of Horse-power.	Description.
1	2	3	4	5	6	7	8	9	10	11	12
43	Iron deep boat ..	Iron deep boat ..	1861-62 ..	93½	9½	4	..	3	48	..	..
44	Wooden deep boat ..	Wooden deep boat ..	1871-72 ..	73	10	4½	..	3¼	35	..	..
45	Do. ..	Do. ..	1872-73 ..	72	12	4½	..	3¼	48	..	..
46	Do. ..	Do. ..	1862-63 ..	43	12½	3¾	..	3½	31	..	..
47	Do. ..	Do. ..	1864-65 ..	71¾	11⅓	5	..	3¾	50	..	..
48	Do. ..	Do. ..	1864-65 ..	71¾	11⅓	5	..	3¾	50	..	..
49	Do. ..	Do. ..	1864-65 ..	71¾	11⅓	5	..	3¾	50	..	..
50	Do. ..	Do. ..	1873-74 ..	72	12	4½	..	3¼	44	..	..
51	Do. ..	Do. ..	1873-74 ..	43	9½	3½	..	2½	19	..	..
52	Do. ..	Do. ..	1873-74 ..	43	9½	3½	..	2½	19	..	..
65	Iron light boat ..	Iron light boat ..	1871 ..	35	8⅓	3	..	2¼	12	..	..
66	Do. ..	Do. ..	1871 ..	35	8⅓	3	..	2¼	12	..	..
67	Do. ..	Do. ..	1871 ..	35	8⅓	3	..	2¼	12	..	..
68	Do. ..	Do. ..	1871 ..	35	8⅓	3	..	2¼	12	..	..
69	Do. ..	Do. ..	1871 ..	35	8⅓	3	..	2¼	12	..	..
70	Do. ..	Do. ..	1871 ..	35	8⅓	3	..	2¼	12	..	..
71	Do. ..	Do. ..	1873-74 ..	35	8⅓	3	..	2¼	12	..	..
72	Do. ..	Do. ..	1873-74 ..	35	8⅓	3	..	2¼	12	..	..
74	Do. ..	Do. ..	1871 ..	35	8⅓	3	..	2¼	12	..	..
75	Do. ..	Do. ..	1871 ..	35	8⅓	3	..	2¼	12	..	..
76	Wooden light boat ..	Wooden light boat ..	1873-74 ..	40	9	3	..	2¼	13	..	..
77	Do. ..	Do. ..	1873-74 ..	40	9	3	..	2¼	13	..	..
78	Do. ..	Do. ..	1872-73 ..	37	7½	3	..	2¼	11	..	..
79	Do. ..	Do. ..	1872-73 ..	37	7½	3	..	2¼	11	..	..
80	Iron flat ..	Late steamer *Rose* ..	1874-75 ..	88	13½	4¼	..	3	63	..	..
81	Do. ..	Canal iron flat ..	1874-75 ..	72	12	3	..	2	30	..	..
82	Wooden flat ..	Wooden flat ..	1875-76 ..	72	12	3	..	2	39	..	..
83	Do. ..	Do. ..	1875-76 ..	72	12	3	..	2	39	..	..
84	Do. ..	Do. ..	1875-76 ..	72	12	3	..	2	39	..	..
85	Do. ..	Do. ..	1875-76 ..	72	12	3	..	2	39	..	..
86	Do. ..	Do. ..	1875-76 ..	72	12	3	..	2	39	..	..
87	Do. ..	Do. ..	1875-76 ..	72	12	3	..	2	39	..	..
88	Do. ..	Do. ..	1876-77 ..	72	12	3	..	2	39	..	..
89	Do. ..	Do. ..	1876-77 ..	72	12	3	..	2	39	..	..
90	Do. ..	Do. ..	1876-77 ..	72	12	3	..	2	39	..	..
91	Do. ..	Do. ..	1876-77 ..	72	12	3	..	2	39	..	..
92	Do. ..	Do. ..	1876-77 ..	72	12	3	..	2	39	..	..
93	Do. ..	Do. ..	1876-77 ..	72	12	3	..	2	39	..	..
94	Do. ..	Do. ..	1876-77 ..	60	13	3	..	2	38	..	..
95	Do. ..	Do. ..	1876-77 ..	60	13	3	..	2	38	..	..
96	Iron punt ..	Canal iron punt ..	1876-77 ..	40	10	3	..	2½	11	..	..
97	Iron flat ..	Half of late steamer *Trevelyan.*	1876-77 ..	87	24	46	..	3	116	..	..
99	Wooden flat ..	Wooden flat ..	1877-78 ..	60	13	3	..	3	38	..	
100	Double trap punt ..	Iron trap punt ..	1879-80 ..	60	10⅓	3¾	..	2	11		High pressure.
101	Do. ..	Do. ..	1879-80 ..	60	10⅓	3¾	..	2	11	..	Do. ..
102	Iron deep boat ..	Late steamer *Little Nell.*	1882-83 ..	90	9′ 6″	4′ 9″	..	3¼	46	..	Do. ..
103	Circular trap punt ..	Circular trap punt ..	1882-83 ..	13′ 6″	13′ 6″	4′	..	3	11¾	..	..
1	Dredge	Canal iron dredge ..	1859-60 ..	90	14	3¾	..	2	42	..	High pressure.

the Cost of Upkeep, and the Fund or Estimate from which to be maintained during the Year 1883-84—*cont.*

Machinery, &c. — Boilers — Pressure.	Machinery, &c. — Boilers — Description.	Machinery, &c. — Propellers — Description.	Machinery, &c. — Propellers — Revolution.	Average Speed, Miles per Hour.	Value of Plant — Original.	Value of Plant — Present Book Value.	Cost of Annual Upkeep.	Where and how employed — District.	Where and how employed — Locality.	Where and how employed — Work.	Where and how employed — Fund.	Remarks. Present Condition and how to be disposed of if irreparable.
13	14	15	16	17	18	19	20	21	22	23	24	25
LB.					RS.	RS.	RS.					
..	..	..	..	Generally towed, sometimes sail.	4,694	3,762	208	..	..	Conveying materials.	..	Wall (or side) plates required to be strengthened in addition to annual repairs.
..	..	..	..	Do.	2,330	1,551	168	..	..	Do.	..	In good order; lately repaired.
..	..	..	..	Do.	2,117	1,570	168	..	..	Do.	..	
..	..	..	..	Do.	1,500	719	168	..	..	Do.	..	In bad order; require annual repairs.
..	..	..	..	Do.	2,000	2,381	168	..	..	Do.	..	In working order; may require annual repairs.
..	..	..	..	Do.	2,000	1,800	168	..	..	Do.	..	
..	..	..	..	Do.	2,000	1,664	168	..	..	Do.	..	
..	..	..	..	Do.	2,117	1,404	168	..	..	Do.	..	In good order; lately repaired.
..	..	..	..	Do.	400	380	91	..	..	Do.	..	
..	..	..	..	Do.	400	367	91	..	..	Do.	..	In bad order; require annual repairs.
..	..	..	..	Do.	1,000	598	62	..	..	Do.	..	Under repairs.
..	..	..	..	Do.	1,000	436	62	..	..	Do.	..	In working order; require annual repairs.
..	..	..	..	Do.	1,000	437	62	..	..	Do.	..	
..	..	..	..	Do.	1,000	718	62	..	..	Do.	..	Under repairs.
..	..	..	..	Do.	1,000	591	62	..	..	Do.	..	
..	..	..	..	Do.	1,000	502	62	..	..	Do.	..	Hull and sides require to be strengthened and decks, &c., repaired in addition to annual repairs.
..	..	..	..	Do.	1,433	650	62	..	..	Do.	..	Under repairs.
..	..	..	..	Do.	1,433	1,317	62	..	..	Do.	..	In good order; lately repaired.
..	..	..	..	Do.	1,000	488	62	..	..	Do.	..	Under repairs.
..	..	..	..	Do.	1,000	902	62	..	..	Do.	..	
..	..	..	..	Do.	750	361	91	..	..	Do.	..	In working order; require annual repairs.
..	..	..	..	Do.	750	438	91	..	..	Do.	..	
..	..	..	..	Do.	200	94	91	..	..	Do.	..	
..	..	..	..	Do.	200	111	91	..	..	Do.	..	
..	..	..	..	Do.	1,000	2,704	348	..	..	Do.	..	In good order.
..	..	..	..	Do.	7,375	3,492	168	..	..	Do.	..	
..	..	..	..	Do.	2,722	1,697	168	..	..	Do.	..	Do. lately repaired.
..	..	..	..	Do.	2,722	1,688	168	..	..	Do.	..	Under repairs.
..	..	..	..	Do.	2,722	1,737	168	..	..	Do.	..	In good order; lately repaired.
..	..	..	..	Do.	2,722	1,490	168	..	..	Do.	..	Under repairs.
..	..	..	..	Do.	2,722	1,490	168	..	..	Do.	..	In bad order; may require extensive repairs to wood-work in addition to annual repairs.
..	..	..	..	Do.	2,722	1,757	168	..	..	Do.	..	In good order; lately repaired.
..	..	..	..	Do.	2,800	1,677	168	..	..	Do.	..	In bad order; may require extensive repairs to wood-work in addition to annual repairs.
..	..	..	..	Do.	2,800	1,865	168	..	..	Do.	..	
..	..	..	..	Do.	2,800	1,865	168	..	..	Do.	..	Under repairs.
..	..	..	..	Do.	2,800	1,857	168	..	..	Do.	..	In bad order; require annual repairs.
..	..	..	..	Do.	2,800	1,849	168	..	..	Do.	..	[illegible]er repairs.
..	..	..	..	Do.	2,800	1,857	168	..	..	Do.	..	In ba[illegible]; may require extensive rep[illegible] in addition to annual repairs.
..	..	..	..	Do.	2,405	1,600	168	..	..	Do.	..	
..	..	..	..	Do.	2,405	1,584	168	..	..	Do.	..	
..	..	..	..	Do.	3,610	2,133	136	..	..	Do.	..	In good order; lately repaired.
..	..	..	..	Do.	4,514	3,112	445	..	..	Do.	..	The deck and wall (or side) plates require strengthening by fitting intermediate ribs, otherwise it is not safe to carry a full load.
..	..	..	..	Do.	2,405	1,580	168	..	..	Dredging.	..	Under repairs.
..	..	..	..	Do.	4,185	3,052	136	..	..	Do.	..	In working order; require annual repairs.
..	..	..	..	Do.	4,185	3,052	136	..	..	Do.	..	
..	..	..	..	1	5,200	5,200	245	..	..	..	..	In good order; lately constructed.
..	..	..	..	..	1,200	1,200	60	..	..	..	..	
60	Horizontal.	..	22	Generally towed, sometimes sail.	26,373	7,229	394	..	..	Dredging.	..	The side (or wall) plates are weak and worn out; requires renewal.

Statement of the Irrigation Floating Plant in the Godávari District showing the Nature of Employment,

Registered Number.	Details of Plant.			Measurement of Plant.						Engines.	
	Description.	Names of Boats, &c.	Date of Construction.	Hull over all. Length.	Hull over all. Breadth.	Hull over all. Depth.	Extra Width for Paddle Box.	When loaded. Draft.	When loaded. Tons carried.	Number of Horse-power.	Description.
1	2	3	4	5	6	7	8	9	10	11	12
2	Dredge	Canal iron dredge..	1859-60 ..	50	8	$3\frac{3}{4}$	..	3	33	4	High pressure.
3	Do.	Do. ..	1859-60 ..	90	14	$3\frac{3}{4}$	..	2	42	8	Do.
4	Do.	Do. ..	1859-60 ..	90	14	$3\frac{3}{4}$	..	2	42	8	Do.
5	Do.	Do. ..	1859-60 ..	90	14	$3\frac{3}{4}$	..	2	42	8	Do.
6	Do.	Do. ..	1859-60 ..	90	14	$3\frac{3}{4}$	..	2	42	8	Do.
1	Wooden Range boat..	First-class Range boat.	1872-73 ..	44	7	3	..	$2\frac{1}{4}$	11	..	..
11	Do. ..	Do. ..	1878-79 ..	50′ 3″	8′ 5″	2	..	$1\frac{1}{2}$	12	..	..
12	Do. ..	Second do. do. ..	1878-79 ..	35	$6\frac{3}{4}$	$2\frac{1}{2}$	..	2	8	..	..
13	Do. ..	Do. ..	1879-80 ..	35	$6\frac{3}{4}$	$2\frac{1}{2}$	..	2	8	..	..
14	Do. ..	First do. do. ..	1880-81 ..	46′ 6″	8′ 6″	2	..	$1\frac{1}{2}$	11	..	..
15	Do. ..	Second do. do. ..	1880-81 ..	33	$6\frac{3}{4}$	$2\frac{1}{2}$	..	2	8	..	..
16	Do. ..	First do. do. ..	1882-83 ..	42	8′ 6″	2	..	$1\frac{1}{2}$	10	..	..
17	Do. ..	Second do. do. ..	1882-83 ..	33	6′ 6″	2	..	2	$7\frac{1}{4}$	..	..

Rule for finding

(1.) Steamers and boats to be reduced 10 per cent. every year and

(2.) Steam dredges to be reduced 15 per cent. do.

(3.) Range boats to be reduced by one-twelfth of their original

DOWLAISHWERAM,
13th October 1882.

the Cost of Upkeep, and the Fund or Estimate from which to be maintained during the Year 1883-84—*cont.*

Machinery, &c.					Value of Plant.			Where and how employed.				Remarks.
Boilers.		Propellers.		Average Speeds Miles per Hour.								
Pressure.	Description.	Description.	Revolution.		Original.	Present Book Value.	Cost of Annual Upkeep.	District.	Locality.	Work.	Fund.	Present Condition and how to be disposed of if irreparable.
13	14	15	16	17	18	19	20	21	22	23	24	25
LB.					RS.	RS.	RS.					
60	Vertical.	..	22	Generally towed, sometimes sail.	15,395	3,265	394	..	..	Dredging.	..	In working order; require annual repairs.
60	Horizontal.	..	22	Do.	30,437	9,536	394	..	..	Do.	..	Require new boilers and machinery put in thorough working order in addition to annual repairs.
60	Do.	..	22	Do.	30,437	14,386	394	..	..	Do.	..	Hulls should be examined as they appear to be weak and machinery be put in thorough working order in addition to annual repairs.
60	Do.	..	22	Do.	30,437	6,511	394	..	..	Do.	..	
60	Do.	..	22	Do.	31,097	15,103	394	..	..	Do.	..	In good order.
..	..	..	..	Do.	1,557	132	168	..	..	Conveying officers.	..	
..	..	..	..	Do.	1,845	1,154	216	..	..	Do.	..	In good order; lately repaired.
..	..	..	..	Do.	820	512	139	..	..	Do.	..	In working order.
..	..	..	..	Do.	820	610	139	..	..	Do.	..	
..	..	..	..	Do.	1,430	1,311	216	..	..	..	..	In good order; lately repaired.
..	..	..	..	Do.	800	733	139	..	..	..	..	
..	..	..	..	Do.	1,250	1,250	216	..	..	Conveying officers.	..	In good order; lately constructed.
..	..	..	..	Do.	850	850	139	..	..	Do.	..	
							17,561					

present book value.
the amount of special repairs, if any, must be added thereto.
do. do. do. do.
cost for each year of their life.

(Signed) W. JOPP, Assistant Engineer,
for Executive Engineer in charge, First Circle.

No. 125 I.

Endorsement on the above.

Submitted to Government.

2. The following abstract compares the details of the estimate for 1883-84 with those of 1882-83 :—

—	Number.		Original Value.		Book Value.		Cost of Upkeep.	
	1882-83.	1883-84.	1882-83.	1883-84.	1882-83.	1883-84.	1882-83.	1883-84.
			RS.	RS.	RS.	RS.	RS.	RS.
Steamers	5	4	67,799	1,00,519	34,528	76,748	1,225	1,725
Dredges	6	6	1,64,176	1,64,176	65,915	56,030	1,932	2,364
Iron flats Nos. 1, 34, 80, 81 and 97.	5	5	23,825	23,825	16,457	11,962	1,297	1,297
Iron punts Nos. 2 to 11, 14 to 17, 19 and 20, 23 to 33, 36, 39 and 96.	32	32	90,768	90,768	69,893	67,377	4,352	4,352
Iron trap punt No. 12	1	..	3,837	..	2,544	..	136	..
Iron trap punts, double, Nos. 100 and 101.	2	2	8,370	8,370	6,782	6,104	272	272
Iron dredge punts Nos. 13, 18, 21 and 22.	4	4	9,240	9,240	4,349	4,092	296	296
Circular trap punt	..	1	..	1,200	..	1,200	..	60
Iron deep boats Nos. 40, 42, 43 and 102.	3	4	14,387	19,587	9,692	15,083	624	869
Iron light boats Nos. 65 to 75 ..	10	10	10,866	10,866	6,935	6,639	620	620
Wooden flats Nos. 82 to 95 and 99.	15	15	40,347	40,347	27,628	25,593	2,520	2,520
Wooden deep boats Nos. 44 to 52.	9	9	14,864	14,864	12,107	11,836	1,358	1,358
Wooden light boats Nos. 76 to 79.	4	4	1,900	1,900	1,114	1,004	364	364
First-class wooden range boats Nos. 1, 11, 14 and 16.	6	4	8,432	6,082	3,587	3,847	840	816
Second-class wooden range boats Nos. 12, 13, 15 and 17.	5	4	4,023	3,290	2,282	2,705	378	556
Third-class do. do. Nos. 9 and 10.	2	..	800	..	34	..	..	..
Jolly boat	1	1	..	..	..	..	..	92
Total ..	110	105	4,63,634	4,95,034	2,63,847	2,90,220	16,214	17,561

3. The steamer *Victoria* has been brought on the return for the first time. The steamer *Little Nell* has been converted into a punt and the steamer *Fawn* has been sold. The iron trap punt No. 12, which was sunk in the Central Delta Main Canal on the 12th September 1878, has been struck off the return, as being irrecoverably lost. A circular trap punt was recently constructed at a cost of Rs. 1,200. Range boats Nos. 2, 3, 4, 5, 7, 9 and 10 were sold. One first-class boat No. 16 and a second-class boat No. 17 were constructed.

4. The cost of upkeep for the ensuing year is estimated at Rs. 17,561, showing an increase of Rs. 1,347 over the estimate for the current year. This is owing partly to the addition of the new steamer *Victoria* and partly to the cost of upkeep of the dredges having been raised from Rs. 322 to 394 each.

CHEPAUK,
27th November 1882.

(Signed) J. O. HASTED, Colonel, R.E.,
Chief Engineer for Irrigation.

To the Joint Secretary to Government,
Public Works Department (Irrigation Branch).

No. 86.

ORDER—dated 29th November 1882, No. 959 I., Public Works.

The estimate, amounting to Rs. 17,561, of the cost of upkeep of the floating plant belonging to the Godávari Delta, is approved and will be included in the Irrigation Budget for 1883-84.

(True Extract.)

(Signed) J. O. HASTED, Colonel, R.E.,
Ag. Joint Secy. to Govt., P.W.D.,
Irrigation Branch.

To the Superintending Engineer, First Circle.
" Chief Engineer for Irrigation.
" Examiner, Public Works Accounts.

IRRIGATION.
ACCOUNT.

Gobt. of {1882} Madras.

PUBLIC WORKS.

Dated November, 29th.

Recd. *Encl.*

G.O., 29th Nov. 1882, No. 959 I.

NOVEMBER.

Nos. 85-86.

Godavari Delta, Floating Plant.

The estimate for the upkeep of the— approved and ordered to be included in the Irrigation Budget for 1883-84.

GOVERNMENT OF MADRAS.

PUBLIC WORKS DEPARTMENT.

Irrigation.
Account.

No. 87.

READ—the following papers :—

Proceedings of the Board of Revenue, dated 26th May 1882, Mis. No. 3752.

Read—the following letter from W. S. FOSTER, Esq., Collector of the Godávari District, to the Secretary to the Board of Revenue, dated Cocanada, 25th March 1882, No. 107:—

Referring to the Proceedings of the Board of Revenue, dated 9th ultimo, No. 779, Routine, I have the honor to report as follows :—

2. Acre 1 cents 04 of Service Inam land of Bhímavaram in the Cocanada Division, belonging to Chintalapudi Ramanamma, petitioner's maternal uncle's wife, was taken up in Fasli 1267 for the Yéléru drainage channel, and land in exchange was sanctioned by the Board of Revenue in their Proceedings dated 23rd August 1880, Miscellaneous No. 9248. The petitioner in June last applied to me for *mesne* profits for nine years, saying that he has received *mesne* profits for fourteen years from Fasli 1267 to 1280, but his petition was rejected on the misapprehension that he has received no compensation for past years.

3. Now he produced evidence to show that *mesne* profits were paid to him up to Fasli 1280. I therefore think that he is entitled for *mesne* profits of Rs. 56-7-0 for nine faslis from 1281 to 1289 at Rs. 6-4-4 a year.

4. There is no provision for the compensation for the work in question as it was completed long ago. I therefore request that the Board of Revenue will be pleased to obtain the sanction of Government for the payment of *mesne* profits of Rs. 56-7-0.

5. The enclosures are herewith returned.

Resolution—dated 26th May 1882, Mis. No. 3752.

Submitted for the orders of Government in the Public Works Department.

(True Copy and Extract.)

(Signed) C. D. MACLEANE,
Acting Sub-Secretary.

No. 1174 C.

Referred to the Superintending Engineer, First Circle, for remarks.

(Signed) ROSS THOMPSON, Lieut.-Col., R.E.,
Ag. Under Secy. to Govt., P.W.D.

31st May 1882.

From G. T. WALCH, Esq., Officiating Superintending Engineer, First Circle, to the Chief Engineer, Public Works Department, dated Dowlaishweram, 26th October 1882, No. 1705 G.D.

With reference to your No. 1174, dated 31st May 1882, and its accompaniments, all herewith returned, I have the honor to inform you that I have no remarks to make with reference to the claim further than the general one that I suppose the Statute of Limitations ought to apply to such claims, or otherwise I see no limit to the unreasonable and even fraudulent claims which will be preferred on the chance of success.

No. 88.

ORDER—dated 29th November 1882, No. 960 I., Public Works.

The payment of the mesne profits, amounting to Rs. 56-7-0, on the Inam land referred to, is sanctioned, and the amount will be met from funds at the disposal of the Superintending Engineer, First Circle, for extensions and improvements in the Godávari Eastern Division.

(True Extract.)

(Signed) J. O. HASTED, Colonel, R.E.,
Ag. Joint Secy. to Govt., P.W.D.,
Irrigation Branch.

To the Superintending Engineer, First Circle.
„ Chief Engineer for Irrigation.
„ Examiner, Public Works Accounts.
„ Revenue Department.
„ Board of Revenue, with three enclosures

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PUBLIC WORKS.

Dated November, 29th.

Recd. *Encl.*

G.O., 29th Nov. 1882, No. 960 I.

NOVEMBER.

Nos. 87-88.

Mesne profits on Inam land.

The payment of — belonging to K. Kesavaraju of Godávari, acquired for public purposes, sanctioned.

GOVERNMENT OF MADRAS.

PUBLIC WORKS DEPARTMENT.

Irrigation.

No. 89.

READ—the following papers:—

G.O. dated 30th October 1882, Mis. No. 3550, Revenue.

Proceedings of the Court of Wards, dated 20th October 1882, Mis. No. 8088.

Read—the following letter from C. S. CROLE, Esq., Acting Collector of Madura, to the Acting Secretary to the Court of Wards, dated 9th October 1882, No. 127:—

With reference to the last of the three points on which the opinion of the Chief Engineer is required by the Court of Wards in their Proceedings No. 2180, dated 1st instant, I have the honor to state that Periyár water does not come down the Vaigai at the point where it is proposed to build the anicut as it is above its (Vaigai) junction with Suriliyar; and that what I meant was that if Periyár project was carried out, the objection that the construction of the proposed anicut would diminish the supply of water to Government and other lands lower down the above anicut would disappear, as these lands would receive a more than equivalent supply from another source.

Resolution—dated 20th October 1882, Mis. No. 8088.

Submitted to Government in continuation of Board's Proceedings No. 2180, dated 1st September 1882, and with especial reference to the third question mooted at the close of paragraph 3.

(True Copy and Extract.)

(Signed) G. GIBSON,
Acting Secretary.

Order—dated 30th October 1882, Mis. No. 3550, Revenue.

Transferred to the Public Works Department, Irrigation Branch, in continuation of this Department endorsement dated 20th September 1882, No. 3082.

(Signed) E. F. WEBSTER,
Secretary to Government.

To the Joint Secretary to Government,
Public Works Department, Irrigation Branch.

No. 90.

ORDER—dated 29th November 1882, No. 961 I., Public Works.

Recorded with reference to G.O., No. 920 I., dated 13th November 1882.

(True Extract.)

(Signed) J. O. HASTED, Colonel, R.E.,
Ag. Joint Secy. to Govt., P.W.D.,
Irrigation Branch.

To the Superintending Engineer, Third Circle.
" do. do. Sixth Circle.
" Chief Engineer for Irrigation.
" Revenue Department.

IRRIGATION.

Govt. of (1882) Madras.

PUBLIC WORKS.

Dated November, 29th.

Recd. *Encl.*

G.O., 29th Nov. 1882, No. 961 I.

NOVEMBER.

Nos. 89-90.

Vaigai River.

Construction of the Samiyappen Anicut.—Recording the opinion of the Collector of Madura that the carrying out of the Periyár Project would admit of the—

GOVERNMENT OF MADRAS.

PUBLIC WORKS DEPARTMENT.

Irrigation.

No. 91.

Read—the following paper :—

Note by the Chief Engineer for Irrigation, dated 27th November 1882.

No. 92.

Order—dated 30th November 1882, No. 962 I., Public Works.

Ordered to be recorded.

(True Extract.)

(Signed) J. O. HASTED, Colonel, R.E.,
Ag. Joint-Secy. to Govt., P.W.D.,
Irrigation Branch.

To the Chief Engineer for Irrigation.
" " Public Works Department.

IRRIGATION.

Govt. of {1882} Madras.

PUBLIC WORKS.

Dated November, 30th.

Recd. *Encl.*

D.O., 30th Nov. 1882, No. 962 I.

NOVEMBER.

Nos. 91-92.

Irrigation Works.

Note by the Chief Engineer for Irrigation on the subject of — in the Madras Presidency, recorded.

GOVERNMENT OF MADRAS.

PUBLIC WORKS DEPARTMENT.

Irrigation.
Account.

No. 93.

READ—the following papers :—

From Major G. F. L. MARSHALL, R.E , Under Secretary to the Government of India, Public Works Department, (Account—Irrigation,) to the Secretary to the Government of Madras, Public Works Department, dated Simla, 13th November 1882, No. 137 A.—I.

I am directed to acknowledge the receipt of your letter No. 805 I., dated 12th October 1882, submitting an estimate of Revenue and Expenditure on the Kurnool Canal from 6th July 1882 to 31st March 1883.

2. In reply I am to communicate the approval of the Government of India thereto, with the exception that the whole of the outlay anticipated to be incurred on the canal must be charged to Revenue.

3. In respect to the classification of the canal as a Protective Work, as proposed by the Government of Madras, I am to point out that under orders received from the Secretary of State, the canal must be treated as a Productive Public Work and all outlay recorded in the accounts accordingly.

No. 93-A.

Note by the Chief Engineer for Irrigation, dated 28th November 1882.

No. 94.

ORDER—dated 30th November 1882, No. 963 I., Public Works.

Communicated to officers concerned.

(True Extract.)

(Signed) J. O. HASTED, Colonel, R.E.,
Ag. Joint Secy to Govt., P.W.D.,
Irrigation Branch.

To the Superintending Engineer, Third Circle.
" Chief Engineer for Irrigation.
" Examiner, Public Works Accounts.
" Revenue Department.
" Board of Revenue.

IRRIGATION.
ACCOUNT.

Govt. of (1882) Madras.

PUBLIC WORKS.

Dated November, 30th.

Recd. *Encl.*

G.O., 30th Nov: 1882, No. 963 I.

NOVEMBER.

Nos. 93-94.

Kurnool Canal.

Remarks of the Government of India on the Estimate of Revenue and Expenditure on the — from 6th July 1882 to 31st March 1883.

GOVERNMENT OF MADRAS.

PUBLIC WORKS DEPARTMENT.

TABULAR STATEMENT OF MISCELLANEOUS PROCEEDINGS AND MATTERS OF ROUTINE,

IRRIGATION,

FOR THE MONTH OF NOVEMBER 1882.

Back Numbers.	Subjects.	Number and Date of Order.	Numbers and Dates of previous Orders.
1, 2	*Madras Irrigation and Canal Company.*—Statement of expenditure for the late — for March and April 1882, compared with the Budget allotment, recorded.	2nd Nov. 1882, No. 887 I.	......
3, 4	*Sangum Project Division.*—Sanctioning certain reappropriations of Budget grants connected with the —.	2nd do. do. No. 888 I.	......
5, 6	*Irrigation Registers.*—Proceedings, Board of Revenue, submitting explanation of the Collector of Tinnevelly regarding the cause of delay in submitting the —, recorded.	3rd do. do. No. 889 I.	......
7, 8	*Minor Irrigation Works in Cuddapah and Chingleput.*—Proceedings of the Board of Revenue submitting to Government with remarks letters from the Collectors forwarding lists of — proposed to be undertaken during the remainder of the current official year, lodged.	3rd do. do. No. 890 I.	25th Oct. 1882, No. 864 I.
8A, 8B	*First Circle—Irrigation allotments.*—The modification of certain —, sanctioned.	4th do. do. No. 896 I.	......
9, 10	*Minor Irrigation Works, Kistna District.*—Proceedings of the Board of Revenue on application of the Collector for funds for —, lodged.	6th do. do. No. 897 I.	31st Oct. 1882, No. 885 I.
11—13	*Floods—Kistna.*—Proceedings of the Board of Revenue in regard to the losses sustained by private persons by the —, recorded.	7th do. do. No. 900 I.	1st Sept. 1882, Nos. 688-689 I.
14, 15	*Srivaikuntham Anicut.*—Regarding the provision of funds for the construction of a bridge over the —.	8th Nov. 1882, No. 901 I.	......
16, 17	*Objectionable Item Statement.*—Passing orders on the — for July 1882, for the Second Circle, under Provincial.	8th do. do. No. 902 I.	......